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R. Hall

R E M A R K S

ON THE

Fistula Lachrymalis;

WITH

The DESCRIPTION of an OPERATION considerably different from that commonly used; and CASES annexed in proof of its Utility:

TO WHICH ARE ADDED,

OBSERVATIONS

ON

HÆMORRHOIDS;

AND

ADDITIONAL REMARKS

ON

T H E O P H T H A L M Y;

By JAMES WARE, SURGEON.

L O N D O N :

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M D C C X C V I I I .

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R E M A R K S

ON THE

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WITH

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OBSERVATIONS

AND

H. MORRIS

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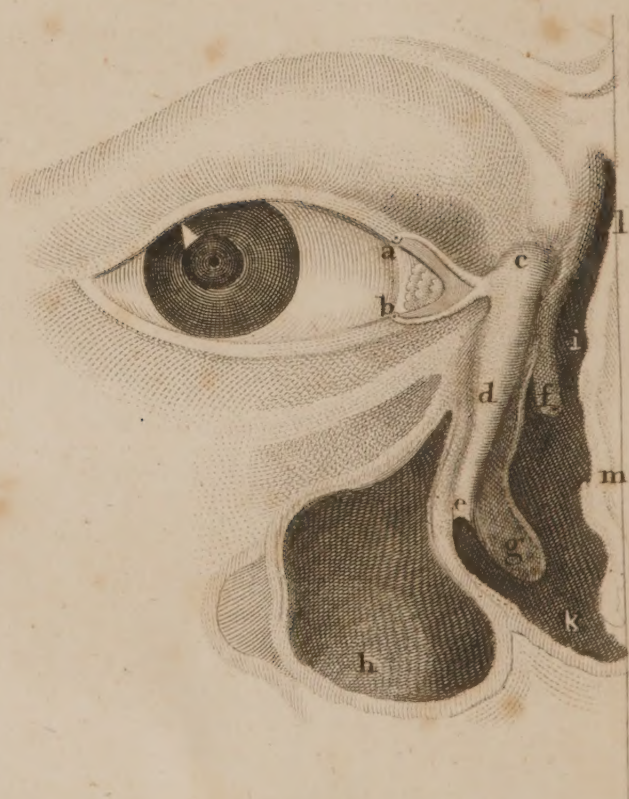
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Plate 1



EXPLANATION OF THE PLATES.

PLATE I.

THE view of a vertical section of the right side of the face, in a line with the third of the *Dentes molares*; in order to shew the position of the lachrymal canal anteriorly, and in its situation, with respect to other parts of the face.

a. b. The *Puncta Lachrymalia*.

c. d. The *Sacculus Lachrymalis*.

d. e. The *Ductus Nasalis*.

e. The termination of the *Ductus Nasalis*.

f. A vertical section through the superior
Os Spongiosum.

g. A vertical section through the inferior
Os Spongiosum.

h. A vertical section through the *Antrum*
Higlmorianum.

i. k. A vertical section through the cavity
of the right nostril.

l. m. A vertical section through the *Sep-*
tum Nasi.

PLATE

PLATE II.

Fig. 1. A view of the spear-pointed lancet, recommended, page 26, for the purpose of puncturing the lachrymal sac.

Fig. 2. A view of the probe, mentioned also page 26. Its blunt end is of use to open an obstruction in the nasal duct; and its sharp end has sometimes been employed to make a perforation through the thin part of the Os Unguis.

Fig. 3. A front and side view of the Style that is recommended, page 27, for the purpose of being inserted in the nasal duct, or being carried through a perforation in the Os Unguis.

¶ These instruments may be procured from Mr. Pepys, Surgeon's Instrument Maker, in the Poultry.

Fig. 1



Fig. 2



Fig. 3



Fig. 3





OBSERVATIONS

ON THE

TREATMENT

OF THE

FISTULA LACHRYMALIS.

IT is well known by Surgeons that a free communication through the lachrymal canal, by which the tears may pass from the eye to the nose, is essentially necessary to the enjoyment of a perfect sight. Every degree of obstruction in this canal has a tendency to impair and weaken vision. When it occasions only a watering of the eye, and a consequent necessity of wiping away the effused tears, the disorder is described by authors under the denomination of Epiphora*; but when a fluid

* On the treatment of the Epiphora I have taken the liberty to lay before the Faculty two small papers, which were published by *Dilly*, with a few other chirurgical observations.

fluid resembling pus is accumulated in the lachrymal sac, which fluid regurgitates through the puncta lachrymalia, when the sac is compressed, or when it is too full to contain more, it is more usually denominated a *Fistula Lachrymalis*. In consequence of the accumulation of this purulent fluid in the cavity of the sac, an inflammation not unfrequently takes place in the integuments which cover it; and this inflammation usually terminates in a suppuration, which varies much in its extent in different instances, according to the length of time the suppurative process has

servations, in the years 1792 and 1795. One of the chief objects which I had in view in writing those papers, was to enforce the recommendation that was first given by Monsieur Anel, of injecting warm water through the inferior punctum lachrymale, in order to remove any thickened mucus that, by its lodgment, might occasion an obstruction in the duct. Other gentlemen for a similar purpose have injected quicksilver; but I do not remember to have seen or heard of a single instance in which the injection of quicksilver accomplished a cure, after that of warm water had failed of success; and, as this last mentioned remedy appears to me much more simple than the former, I usually still prefer it.

been

been suffered to proceed, before the matter is discharged. Sometimes it is so large as to occupy the whole of the eyelids, and at others so small as only to affect the sac itself; and in both it is highly improbable that a cure of the disorder should be accomplished, without the use of means, not only to open the obstruction in the nasal duct, but to hinder a return of the obstruction afterwards*.

Prior to the year 1781, the authors whose publications on the *Fistula Lachrymalis* principally attracted the notice of the faculty in this country, and by whose directions their practice for many years was chiefly regulated, were Mr. Pott and

* A few instances have come under my notice, in which, after an *Epiphora* had continued many years, an extensive suppuration has taken place in the lachrymal sac, and the integuments which cover it; and when the matter which was accumulated has been discharged, the tumefaction has subsided, the wound has healed, and the tears have resumed their natural course. A termination of the disorder, however, in this easy way, must not be considered an usual occurrence.

Mr. Warner ; of whom the former published a treatise professedly on this subject in the year 1758 ; and the latter introduced a tolerably full account of it in his “ Description of the human Eye, and “ the disorders to which it is subject ;” which work first appeared in the year 1773.

In order more clearly to shew the difference between the treatment proposed by these gentlemen, and that which I mean to recommend, I beg leave to introduce the following brief abstract of the observations they published on the subject now before us.

When the lachrymal sac and the integuments which cover it are inflamed and distended, Mr. Pott recommends to make an opening into the cavity of the cyst from the upper to the lower extent of the tumor ; and afterwards to dilate the wound either with lint, or prepared sponge, in order to give an opportunity of ascertaining the state of the sac and duct. If, after a free
discharge

discharge has been made for some days, and the inflammation occasioned by the first operation is gone off, the sac does not contract, and the lachrymal fluid resume its wonted course, Mr. Pott recommends to dilate the passage from the sac to the nose, by some means which will gradually distend it, without destroying its texture; in a way similar to that in which the dilatation of the Urethra is effected, in the case of strictures, by passing either a probe, a piece of catgut, or a bougie, gently into it, as far as it will easily go, and repeating the operation occasionally until it has got quite through, and the passage is free. And if the natural passage from the lachrymal sac to the nose be so diseased as to be quite closed up, Mr. P. directs to attempt the formation of an artificial passage, by making a breach in the thin part of the Os Unguis with a curved trocar of a suitable size. Mr. P. adds,

“ as soon as the perforation is made, a
 “ tent of lint should be introduced of
 “ such a size as to fill the aperture, and

“ so long as to pass through it into the
 “ cavity of the nose. This should be
 “ permitted to remain in, two, three, or
 “ four days, till the suppuration of the
 “ parts renders its extraction easy ; and,
 “ after that, a fresh one should be passed
 “ every day, until the clean granulating
 “ appearance of the sore makes it probable
 “ that the edges of the divided mem-
 “ brane are in the same state ; the bu-
 “ siness now is to prevent the incarnation
 “ from closing the orifice, for which pur-
 “ pose the end of the tent may be moist-
 “ ened with spiritus vitrioli tenuis : or, a
 “ piece of lunar caustic, so included in a
 “ quill as to leave little more than the
 “ extremity naked, may at each dressing,
 “ or every other, or every third day, be
 “ introduced, by which the granulation
 “ will be repressed, and the opening main-
 “ tained ; and when this has been done
 “ for some little time, a piece of bougie
 “ of a proper size, or a leaden canula,
 “ may be introduced instead of the tent ;
 “ and leaving off all other dressings, the
 “ fore

“ fore may be suffered to contract, as
 “ much as the bougie will permit, which
 “ should be of such length, that one ex-
 “ tremity of it may lie level with the skin
 “ in the corner of the eye, and the other
 “ be within the nose.

“ The longer time the patient can be
 “ prevailed upon to wear the bougie, the
 “ more likely will be the continuance of
 “ the opening; and when it is withdrawn,
 “ the external orifice should be covered
 “ only by a superficial pledgit, or plaister,
 “ and suffered to heal under moderate
 “ pressure *.”

Mr. Pott concludes his observations in
 the following cautious manner: “ I must
 “ again repeat what I have said before,
 “ that there is no method of treating this
 “ disorder which is infallible, and none
 “ that will absolutely and in all cases pre-
 “ vent a return, especially in scrophulous

* Pott on the Fistula Lachrymalis, p. 68.

“ habits : yet when a just distinction is
 “ made between those cases which are in
 “ their own nature incapable of cure, and
 “ those which by being improperly treated
 “ are not cured, I am inclined to believe
 “ that the number of the former will be
 “ found much smaller than it is generally
 “ imagined to be *.”

Mr. Warner's observations on the Fiftula Lachrymalis are much shorter than those made by Mr. Pott. He says “ This
 “ malady is seldom or ever curable by any
 “ other means than by operation ; and the
 “ mode of operating must be different
 “ under different circumstances. If the
 “ lachrymal sac and its integuments be
 “ distended with only a small degree of
 “ inflammation, and thinness of the skin,
 “ a single incision made with a small sharp
 “ round pointed knife, and carried from
 “ the upper to the lower extent of the tu-
 “ mor, quite down into the cavity of the
 “ cyst, will sometimes be found sufficient

* Pott on Fist. Lach. p. 70.

“ for

“ for the purposes of applying proper
 “ dressings to the bottom of the diseased
 “ sac. But where the skin is much lifted
 “ up, and is grown thin and discoloured,
 “ from a large quantity of matter that has
 “ long been deposited and confined in the
 “ sac; or where the integuments have
 “ burst and are become callous; and the
 “ natural colour of them is altered to a
 “ mixture of paleness and lividness, it
 “ will be found expedient, in the first in-
 “ stance, to remove an oval piece of the
 “ integuments and sac, by making the
 “ incisions equally long with the distended
 “ skin, and of such a breadth, as will ad-
 “ mit of a removal of the greatest part of
 “ the diseased integuments and sac: and
 “ in the second instance, the whole of the
 “ callous integuments, together with the
 “ upper part of the lachrymal sac, must be
 “ cut away at the time of operating, to
 “ afford us all the advantages of the
 “ proper treatment of an hollow ill-con-
 “ ditioned fore*.”

* Warner's Description of the Human Eye, &c. 2d.
 Edit. p. 18.

It is somewhat remarkable that Mr. Warner does not say one word in any part of his book on the propriety of attempting to open the obstruction in the nasal duct ; of the practicability of which it may from hence be presumed he was either uninformed or incredulous ; and he recommends to perforate the Os Unguis, in all those cases where the disorder cannot be cured by the operations that have been just mentioned. He says, “ By some it is advised
 “ that the process of perforating the Os
 “ Unguis should not be put in execution
 “ when this bone does not appear to be
 “ carious, the true characteristic of which
 “ is its being divested of its Periostæum.
 “ But I must dissent from this opinion,
 “ since I have several times learnt from
 “ experience, that there is no curing a
 “ disease of this kind without destroying
 “ the Os Unguis, at least in part, even
 “ when that bone is not denuded and
 “ carious *.”

* Warner on the Human Eye, p. 20.

The perforation through the Os Unguis Mr. Warner says he has often made with the edge of his incision knife; and if a trocar be thought necessary for this purpose, he advises that it be not much curved, lest its point be brought so much forwards and outwards, as to strike the nasal process of the superior maxillary bone. Mr. Warner adds, that after the perforation is made, it is his custom to introduce a small long sponge tent through the wound into the nostril, and to continue the use of it ten or twelve days, or longer, as he sees necessary. He makes use of a thin soft injection once or twice in the day, whenever he dresses the wound, in order to keep the parts clean and open quite into the nostril; and when, from the free passage of a probe or bougie, the opening appears to be sufficiently confirmed, he employs soft tents of lint for a week or ten days longer, applying them carefully to the bottom of the wound, and touching the sprouting and loose flesh occasionally with the lunar caustic. This he continues

continues to do till he is satisfied of there being no more discharge from the wound than there ought to be from any other wound of the same size ; after which he only covers it with a superficial dressing, and suffers it to heal. Mr. Warner adds, that “ after the wound is healed, the tears “ in some will not be any longer trouble- “ some by their falling upon the cheek, “ whilst in others, they shall continue to “ be so in a small degree.”

The above directions on the Treatment of the Fistula Lachrymalis, as given by Mr. Pott and Mr. Warner, are those which, I believe, were principally regarded by the surgeons of this country for many years prior to the year 1781.

About this time, Mr. Wathen having met with repeated disappointments in his attempts to cure the disorder, by pursuing the modes which were recommended by these gentlemen, determined to try the effects of introducing a metallic tube or canula

nula into the nasal duct, with a view not only to form a communication between the eye and the nose, but, by suffering the wound to heal over the instrument, to hinder the obstruction from returning afterwards. This idea of Mr. Wathen differed from that of Heister, (as mentioned in his System of Surgery, part 2, chapter 54,) principally in the position of the instrument; Heister proposing to insert it into a perforation of the Os Unguis, whereas Mr. Wathen conceived that it might be made more useful if placed in the natural nasal duct. He accordingly made the experiment in the way above-mentioned, and the success which attended it was so speedy, and appeared to be so compleat, that both he and I, who for some years before and after this period were connected together in practice, repeated the operation in a great variety of instances, and almost universally accomplished by it a perfect and speedy removal of every unpleasant symptom. The tears resumed their natural course, the wounds healed,

healed, and the sight became both clear and strong. This flattering prospect, however, did not continue a great length of time ; difficulties were soon experienced which gave both Mr. Wathen and myself much uneasiness as well as trouble. The tubes frequently changed their position in the duct ; sometimes they rose too high ; at other times they sunk too low ; and in consequence of these accidents the tears became often again obstructed, and all the old symptoms returned. In some instances the disappointment was experienced within a short period after the tubes were introduced ; in others the patients continued well several weeks, and sometimes several months, before any cause of alarm arose. A return of the disorder however occurred so frequently, that for several years prior to the termination of my partnership with Mr. Wathen, in the year 1790, neither of us placed any considerable degree of dependance on this mode of treating the disorder.

In

In the beginning of the year 1785, Mr. Bell, of Edinburgh, published the third volume of his *System of Surgery*, and in it introduced his remarks on diseases of the eyes. His observations on the *Fistula Lachrymalis* do not differ in any material points from those which were made by Mr. Pott. Towards the close of his remarks, Mr. Bell briefly mentions the proposition that had been made by former authors of inserting a metallic tube or canula either into the natural nasal duct, or into a perforation made through the *Os Unguis*, in order to insure the cure, and to prevent a return of the disorder; but when this volume was published, he does not seem to have had any great experience of their efficacy in either of these ways of employing them.

In the year 1787, Mr. Bell published a fourth volume of his *System*; and in it unexpectedly gave an additional chapter on the diseases of the eyes. His chief motive for doing this, appears to have been to
introduce

introduce an account of some supposed improvements in their treatment, which had been made by Monsieur Jean François Pellier, a French oculist, with whom he became acquainted after his third volume had been published. Among a variety of observations relative to these diseases, he added several on the Fistula Lachrymalis, and introduced them with the following mortifying acknowledgement: “ It seldom
 “ happens that any permanent advantage
 “ is obtained from the remedies applied
 “ in this disorder, and even they who are
 “ much accustomed to the management
 “ of it often fail entirely.” Mr. Bell then states that one of the chief causes of the failure has arisen from the passage becoming again impervious after it had been opened; and he adds, “ that it would
 “ be the idea perhaps of most practi-
 “ tioners to leave a tube in the opening,
 “ were it not liable to one very material
 “ objection, namely, the uncertainty of
 “ its continuing fixed in its situation; for
 “ hitherto we have not been possessed of

“ any certain method of preventing the
 “ canula either from rising and forcing its
 “ way out at the corner of the eye, or
 “ from passing down, and coming out at
 “ the nose *.” He then adverts to various
 forms of tubes which he had delineated
 in his former volume, and adds, “ that
 “ the invention of M. Pellier appears to
 “ be much superior to any of them.”
 In one instance, Mr. Bell says, he knew
 it to have answered compleatly, though
 eighteen months had elapsed when he
 published the second edition of this vo-
 lume, from whence I extract the present
 remark.

The peculiarity in the form of M. Pel-
 lier's tubes consists in their having two
 projecting edges; one at the top forming
 a kind of brim, and another nearly mid-
 way between this and the lower end of
 the instrument. By means of these, when
 it is properly fixed in the passage where it

* Bell's System of Surgery, vol. 4. page 55.

is to remain, it is kept firm ; the granulations which shoot out from the contiguous parts surrounding that portion of the tube which lays between the two projecting edges, and preventing it from passing either upwards or downwards.

In the year 1792 Mr. Wathen published a second edition of his tract on this disorder ; and in it, as in the former edition of this work, it was his chief object to recommend for its cure, the insertion of a metallic tube in the nasal duct of the lachrymal canal. The shape of the instrument, however, was now considerably varied from that which it had when the first edition appeared ; and Mr. Wathen seems to have taken much pains to adjust the tube to the size of the canal, by making an accurate measurement of their different parts. In the introduction to the work he observes, that “ having accomplished his
 “ views in this respect by a simple apparatus, he can with confidence affirm
 “ that almost every degree of the Fistula
 “ Lachrymalis

“ Lachrymalis is capable of being perfectly cured by means more simple, less painful, more speedy, and less deforming, than any hitherto employed for this purpose.”

It would afford me the sincerest pleasure, if the experience which I have had of the use of tubes, when employed for the cure of the Fistula Lachrymalis, would enable me to confirm the strong recommendation of them which has just been recited. After, however, an almost unremitting attention to the effects they produce, during a period of no less than twelve years, that is, from the year 1781 to the year 1793, and after having endeavoured to improve them by adopting the alterations that have been proposed, with respect to their shape and the mode of introducing them, by Mr. Wathen and Monsieur Pellier, I am still obliged to say, that I have experienced so many disappointments in my own practice, and have observed so many in that of others, that for

the last three years I have wholly declined to employ them. Mr. Wathen and Monsieur Pellier appear to have been of opinion, that when the cure was not completed under the use of them, the failure was chiefly owing to their improper or unsteady position in the nasal duct; and to this cause I do not doubt many of the disappointments they experienced may, with great justice, be attributed; but I have met with repeated instances to convince me, that the failure has also often been occasioned by a cause which these gentlemen do not seem to have noticed; I mean, by the lodgement of inspissated mucus in the cavity of the tubes; which mucus, in those cases where I have been obliged to withdraw them, has sometimes become so hard as to be impenetrable without the exertion of considerable force.

Mr. Wathen says the tube may be withdrawn with ease, if it do not answer the intended purpose. Many of my friends, however, as well as myself, have experienced

rienced much trouble,—have given the patient great pain,—and in some instances have been obliged to repeat our efforts several times,—before we could disengage the instrument from the firm hold which it had taken in the lachrymal canal.

The operation which I have adopted in place of that of inserting a tube in the nasal duct, is, in general, so easy to be performed, has so speedily removed every troublesome symptom, and in a great variety of instances has so effectually accomplished a cure of the disorder, that I am induced to hope a description of it may not be unacceptable to my brethren in the profession.

It is an enquiry, however, of great importance, and it ought to be well considered, before this, or indeed before any surgical operation be determined upon, whether the inconveniencies arising from the disorder are sufficiently great to render the operation necessary. And in aid of

this previous enquiry, it should also be duly considered, what degree both of pain and of hazard are likely to be incurred by the operation; and how far experience will justify the performance of it, by affording a probability of its answering the intended purpose of a cure.

When the obstruction to the passage of the tears has occasioned an inflammation and suppuration in the integuments which cover the lachrymal sac, and these have returned repeatedly, at short intervals, leaving the eye at all times weak and watery, it cannot be doubted that means should be employed to remove the obstruction, although there may be some degree of uncertainty whether they are sufficient to accomplish the intended object.

When again an ulcer is formed over the lachrymal sac, through which the tears, mixed with either pus or mucus, are continually issuing, and this ulcer is connected with sinusses which run in different directions,

directions, there cannot be any doubt as to the propriety of proposing an operation, though it should afford only a probable chance of effecting a cure.

When, however, the only inconvenience which the patient sustains is a watering of the eye, and a necessity, consequent upon this, of frequently wiping away the tears which run over the cheek, it was the advice both of Mr. Pott and Mr. Warner to submit to the disorder, rather than to hazard a painful operation, in the uncertain hope of having it removed.

But it should be remembered that this advice was given upon a presumption that the operation will necessarily occasion much pain and trouble, and will be attended with great uncertainty as to its eventual success; and under these circumstances, it is undoubtedly both a wise and a prudent admonition: but if the pain occasioned by the operation I am about to describe, be,

as I trust I shall be able to prove, both slight and of short duration ; if there be not the least ground to apprehend any injurious consequences from it ; and if, on the contrary, there be good reason to believe that the watering of the eye, and all the other troublesome symptoms, will speedily be removed by it,—in such a case, I think, we are justified in recommending it, though the inconveniences produced by the disorder be not so great as would warrant us in having recourse to that which has been proposed by former authors.

No one, indeed, can doubt, that it is the duty of a Surgeon, in all instances, to endeavour to remove disorders by the least painful means that can be devised. Upon this principle, whenever a patient applies to me for relief, on account of an obstruction in the lachrymal passage, I always think it right to attempt to clear the canal from any inspissated mucus that may be lodged in it, by injecting some warm water through the inferior
punctum

punctum lachrymale ; joining with it, when necessary, a trial of the other remedies that have been proposed in the two papers on the Epiphora, which were laid before the public in the years 1792 and 1795. But if after the use of these for about a week or ten days, there be not some perceptible advance towards a cure, or, if, from the long continuance of the obstruction, there be reason to fear that it is too firmly fixed to yield to this easy mode of treatment, I do not hesitate to propose the operation which is now to be described. The only persons with respect to whom I entertain any doubts as to the propriety of this opinion, are infants. These, as well as persons of a more advanced age, are sometimes afflicted with an obstruction in the lachrymal canal ; and in such subjects I always think it advisable to postpone the operation, unless the symptoms be particularly urgent, until they are eight or nine years old.

When the operation is determined upon,
the

the following is the mode in which I would recommend it to be performed:— If the disease has not occasioned an aperture in the lachrymal sac, or if this aperture be not situated in a right line with the longitudinal direction of the nasal duct, a puncture should be made into the sac, at a small distance from the internal juncture of the palpebræ, and nearly in a line drawn horizontally from this juncture towards the nose, with a spear-pointed lancet, of a size similar to that which is represented, Fig. 1, in the second plate. The blunt end of a silver probe, of a size rather smaller than the probes that are commonly used by Surgeons, should then be introduced through the wound, and gently, but steadily, be pushed on in the direction of the nasal duct, with a force sufficient to overcome the obstruction in this canal, and until there is reason to believe that it has freely entered into the cavity of the nose. The position of the probe, when thus introduced, will be nearly perpendicular; its side will touch
the

the upper edge of the orbit ; and the space between its bulbous end in the nose and the wound in the skin will usually be found, in a full-grown person, to be about an inch and a quarter, or an inch and three-eighths. The probe is then to be withdrawn, and a silver style of a size nearly similar to that of the probe, but rather smaller, about an inch and three-eighths in length, with a flat head like that of a nail, but placed obliquely, that it may fit close on the skin, (see Fig. 2, in the second plate,) is to be introduced through the duct, in place of the probe, and to be left constantly in it*. For the first day

* It may be proper to introduce, at first, a style which has a head somewhat larger than that which is represented in the annexed plate, in order to hinder it from being wholly buried, by an unguarded pressure, beneath the external integuments ; which accident I have known to happen in one or two instances, and to occasion both pain to the patient, and trouble to the surgeon, before the instrument could be retracted. The aperture in the skin, however, usually contracts in a short time so much, that it only leaves room for the style to pass through it ; and when this takes place, an instrument with a smaller head may be employed, in order to make it less conspicuous to observers.

or

or two after the style has been introduced, it is sometimes advisable to wash the eye with a weak saturnine lotion, in order to obviate any tendency to inflammation which may have been excited by the operation; but this in general is so slight, that I have rarely had occasion to use any application to remove it. The style should be withdrawn once every day for about a week, and afterwards every second or third day. Some warm water should each time be injected through the duct into the nose, and the instrument be afterwards replaced in the same manner as before. I formerly used to cover the head of the style with a piece of diachylon plaister spread on black silk; but have of late obviated the necessity for applying any plaister by blackening the head of the style with sealing-wax *.

The

* To black the head of a style, fix its small end in a cork, for the purpose of holding it; then put its other end over a lighted candle until it is quite hot, and press it immediately against a piece of the best black sealing wax,

The effect produced by the style, when introduced in the way above-mentioned, at first gave me much surprize. It was employed with a view similar to that with which Mr. Pott recommends the introduction of a bougie; viz. to open and dilate the nasal duct, and thus to establish a passage, through which the tears might afterwards be conveyed from the eye to the nose. I expected, however, that whilst the style continued in the duct, the obstruction would remain; and of course that the watering of the eye, and the weakness of the sight, would prove as troublesome as they had been before the instrument was introduced. I did not imagine that any essential benefit could result from the operation until the style was removed, and the passage thereby opened. It was an agreeable disappointment to me to find that the amendment was much more

wax, part of which will adhere to it. Let it then again be held over the candle for about a minute, when the wax will become perfectly smooth and polished.

expeditious.

expeditious. The watering of the eye almost wholly ceased as soon as the style was introduced ; and in proportion as the patient amended in this respect, his sight also became more strong and useful. The style, therefore, seems to act in a two-fold capacity : first, it dilates the obstructed passage ; and then, by an attraction, somewhat similar to that of a capillary tube, it guides the tears through the duct into the nose.

The wound that I usually make into the sac, if the suppurative process has not formed a suitable aperture in this part, is no larger than is just sufficient to admit the end of the probe or style ; and this, in general, in a little time, becomes a fistulous orifice, through which the style is passed without occasioning the smallest degree of pain. The accumulation of matter in the lachrymal sac, which, previous to the operation, is often copious, usually abates soon after the operation has been performed ; and, in about a week or
ten

ten days, the treatment of the case becomes so easy, that the patient himself, or some friend or servant who is constantly with him, is fully competent to do the whole that is necessary. It consists solely in withdrawing the style two or three times in the week, occasionally injecting some warm water, and then replacing the instrument in the same way in which it was done before.

It is not easy to ascertain the exact length of time that the style should be continued in the duct. Some have worn it many years, and, not finding any inconvenience from the instrument, are still afraid and unwilling to part from it. Others, on the contrary, have disused it at the end of about a month or six weeks, and have not had the smallest return of the obstruction afterwards.

The troublesome ulcerations, which are sometimes formed over the lachrymal sac, heal, in general, as soon as an opening is established

established through which the tears may pass into the nose. But in two instances which lately came under my care, in which the patients had occasionally been subject to violent cutaneous eruptions, these wounds did not heal so soon as I expected; and a considerable quantity of purulent matter was discharged through the aperture that had been made to admit the style, several days after the operation was performed. Both these cases were evidently relieved by administering internally a weak solution of the Hydrargyrus Muriatus, together with a light preparation of the Peruvian Bark; and by pursuing the use of these medicines, the wounds in a short time closed; the aperture, which had been made with the lancet contracted into a fistulous orifice, just large enough to admit the end of the style, and the purulent discharge wholly ceased.

The position both of the probe and style is very nearly the same, whether they be passed through the natural nasal duct, or
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through

through a perforation in the thin part of the Os Unguis ; and I have reason to believe that it does not essentially signify in which of these ways the operation is performed. It may be proper, however, to point out a few circumstances in which the two operations appear to differ. One is, that in consequence of the nasal duct being lined with a smooth membrane, the instrument usually passes through it with facility ; and its passage is unaccompanied with that sensation of a forcible breach, which is perceived by the operator when it makes its way for the first time through the substance of the Os Unguis.—Another is, that when the instrument has passed through the nasal duct, it has nearly a perpendicular position with respect to the usual posture of the body ; whereas, when it has passed through the Os Unguis, it has an oblique direction downward and inward.—A third difference is, that in the former instance, the instrument is more firmly fixed than it is in the latter, in which it often has an un-

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steady

steady motion when touched with the finger. By an attention to these hints, I think it may be discovered with tolerable certainty in which of the two ways the instrument has passed; and, I believe, I may venture to add, that whether the style be introduced in the former or latter of these directions, it is equally able to conduct the tears into the nose, and to accomplish a cure of the disorder.

After all, however, I do not wish to recommend in unqualified terms the operation that has now been described. There are none in surgery which are not subject to difficulties; and I should be sorry, by omitting to mention any with which I have become acquainted, to mislead those who are inclined to pay attention to my advice. I beg leave to observe, therefore, that in a few instances I have passed, first a probe, and afterwards a style, an inch and three-eighths in length, through a passage in the direction of the lachrymal duct, and, as it appeared to me, into the cavity of the nose, yet neither

ther the accumulation of mucus in the sac, the regurgitation of tears through the puncta lachrymalia, nor the weakness of sight produced by these, have been in any degree relieved by it. I have increased the length of the style to an inch and three quarters ; but still the obstruction in the lachrymal passage has continued, and the attempt to inject warm water through the new aperture into the nose has also failed. In such cases it seems evident, notwithstanding the position of the probe and style may at first have encouraged a different supposition, that neither of these instruments did really pass into the cavity of the nose. The cases are very few in which this accident has occurred ; and it is remarkable that each of them was unaccompanied, prior to the operation, either with an inflammation or tumefaction of the lachrymal sac, the operation having been undertaken solely on account of the perpetual trouble which the watering of the eye occasioned. From hence I have been led to suspect, that, notwithstanding

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the aperture made by the lancet appeared to enter the lachrymal sac, and the probe and the style to pass through the duct into the nose, I was mistaken in my opinion in these respects; instead of which the probe was only forced between the groove of the Os Unguis and the thickened membrane which lined it, without entering at all into the proper lachrymal canal; and in consequence of this disappointment, it unavoidably happened that the water injected through the wound was unable to pass forwards into the nose, and wholly regurgitated either through the wound, or through the puncta lachrymalia over the eye. This opinion seems strengthened by the advantage which, in some such cases, has afterwards been derived from a perforation carried through the thin part of the Os Unguis; after which the injected liquor has passed immediately into the fauces, and, on introducing a style through the aperture, the watering of the eye has immediately ceased.

In those cases where the nasal duct is so compleatly obstructed that the blunt end of a probe cannot be made to pass through it, there does not appear to me to be any way of obtaining a passage for the tears from the eye to the nose, so easy, or so effectual, as that of making a perforation through the thin part of the Os Unguis ; adopting some method afterwards by which the communication between these parts may be preserved from closing. I shall not dwell upon the mode in which this was advised by antient authors to be performed, by the use of the actual cautery. It is now well known, that every purpose which the cautery is able to accomplish, may be attained by means which are much less alarming, as well as less painful. I have often perforated this part of the bone with the sharp end of a probe. Mr. Pott gave the preference to a curved trocar ; and by others the bone has been pierced with the sharp end of a common incision knife. In either of these ways the perforation may be made with equal safety

by a person who is acquainted with the situation and structure of the nasal canal. Let it only be remembered, that the instrument should not be pushed transversely through, least its point strike unnecessarily against the *Os Spongiosum superius*; nor should it be carried perpendicularly, lest it get into the channel of the nasal duct, and be stopped by bearing against that part of the maxilla superior, which contributes to the formation of this channel. On the contrary, when its point has reached the beginning of the nasal duct, it should be turned obliquely downwards and inwards, and be gently pushed on in this direction; by which means it will pass through the *Os Unguis*, in its thinnest part, (See Plate 1,) making a slight crackling noise as it pierces the bone; and will enter the nostril in the open space that lies between the *Os Spongiosum superius* and the *Os Spongiosum inferius*. When this part of the operation is accomplished, the perforating instrument should be withdrawn; and a nail-headed style, about an
 inch

inch long, be introduced through the aperture, in the same way in which it is introduced through the nasal duct in those cases where the obstruction is not so great as to prevent its passing in this direction; and it may remain here with as much safety as in this last-mentioned instance, for as long a time as its continuance may be thought necessary to establish the freedom of the communication. It may be proper to observe, that when the style is carried through a perforation in the *Os Unguis*, the length of an inch is sufficient to allow its end to reach the open space that lies between the *Os Spongiosum superius* and the *Os Spongiosum inferius*; and, if it were longer, it would be liable to be entangled either in the *Septum Nasi*, or in the *Os Spongiosum inferius*. But when it is carried through the natural nasal duct, its length must not be less in an adult person than an inch and a quarter, or an inch and three-eighths, in order to allow it to pass compleatly through the duct into the nose.

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Although the perforation through the thin part of the Os Unguis is made, in general, as has been just observed, with great facility, yet in a few instances I have experienced, in making it, a great obstruction to the passage of the instrument, which obstruction appears to me to have been occasioned by a peculiar thickness in this part of the bone.

Mr. Wathen, in the second edition of his tract on the Fistula Lachrymalis, page 47, mentions, that an Exostosis of the Maxillary bone may not only close up, but destroy, the nasal duct; and, as a remedy for the inconvenience arising from this disease, he proposes, page 50, “ to
 “ apply a drill of a small size through
 “ the external wound, in such a direc-
 “ tion, that, when worked, it may make
 “ a passage through the ossified part, pre-
 “ cisely in the course of the natural duct;
 “ and to repeat this process by a larger
 “ instrument of the same kind, until the
 “ perforation is as large, or rather larger,
 “ than the original and obliterated passage.”

After

After this, if there be any doubts with respect to its sufficiency in conveying the tears for the future into the nose, he recommends to insert either a tube or a tent *, as shall be judged most expedient ; by which method, he is of opinion, that “ this effect will most assuredly be obtained and continued through life.”

I beg leave however to observe, that a *Fistula Lachrymalis* produced by an *Exostosis* of the *Os Maxillare* does not seem to differ in any essential points from those other cases of this disorder, in which the nasal duct is so compleatly filled up, that a probe cannot be made to pass through it ; and, in all of these, it appears to me much more easy to perforate the thin part of the *Os Unguis*, than to attempt to force a way

* The tent recommended by Mr. Wathen is hollow as well as the tube ; and it appears to me to differ from the last-mentioned instrument in no other respect than that of its having a longer head ; which, if I understand Mr. Wathen rightly, is intended chiefly to keep the lachrymal sac from contracting into too small a cavity.

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into the nose, by drilling through the thick portion of bone in which the nasal duct was formerly situated. Mr. Wathen, in several parts of his book, discovers a great dislike of the former of these operations. I am inclined, however, to believe, that, when the obstruction has been long continued, it is not only more easy to perforate the Os Unguis than to renew the old passage, but that it is in every respect, as likely to effect a radical cure of the disorder. In those cases, also, in which a tube or tent has been supposed to be inserted into the nasal duct, I am much disposed to doubt, whether the instrument has not sometimes been placed, inadvertently, in a perforation, that has been made by the probe through the Os Unguis. And with regard to the insertion of such tube or tent to perpetuate the passage, after it has been made with a drill, in the way recommended by Mr. Wathen, the same objections lie against its use here, which may be made against its insertion in the natural nasal duct; and these appear to me

me so considerable, that, though I was formerly a friend to the operation, they have determined me, for several years past, wholly to relinquish it.

It may, perhaps, be thought, that the operation which I have taken the liberty to recommend in the preceding pages, has a close resemblance to that which was proposed by the late Mr. Pott. It will be found to differ from it, however, in many essential respects.—Mr. Pott, for instance, as well as Mr. Warner and Mr. Bell, advises the operator to make a large opening into the lachrymal sac. On the contrary, I have proposed to make a small one.—These gentlemen, again, afterwards recommend different kinds of dressings; some of which are difficult to be applied, and painful in their action. The dressing, which I have proposed, is confined simply and solely to a silver nail-headed style.—Their operation is performed, and their dressings employed, in order to form a communication, through which the tears may afterwards pass into

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the nose ; and until this passage is formed, and the necessity for further dressings ceases, they do not encourage any hope that the disorder will be removed. Experience, however, teaches me, that as soon as the style is introduced, the disorder immediately ceases ; and the tears pass, at once, into the nose, either through the natural nasal duct, or through the perforation that is made by the operator in the thin part of the Os Unguis.

I now proceed to relate a few cases with a view to exemplify the remarks that have been above made. They are selected from a considerable number, in which a similar mode of treatment has been attended with an equal degree of success. In a paper of this kind I do not feel myself at liberty to mention the names of the persons whose cases are recorded ; but being fully sensible the ease with which histories of this kind may either be manufactured, or altered, in order to support a favourite system, I have felt it incumbent upon me, for the satisfaction

faction of the reader, to mention the names of the medical gentlemen who attended the cases with me; and through them a reference may at any time be made to the patients themselves. I am not conscious of any deviation from the strict line of truth in the details that are given of them.

C A S E S.

CASE I.

An obstruction in the Lachrymal Canal, of several years continuance, perfectly and speedily cured by the introduction of a nail-headed style through the nasal duct.

A young lady of Oxford, who for upwards of three years had been subject to an almost continual watering of one of her eyes, accompanied at different times with a troublesome inflammation of the Tunica Conjunctiva, was introduced to me on the 8th of July, 1796, by Mr. Curtis, surgeon,

geon, at Islington. Prior to my being consulted, the tears had frequently been mixed with a small portion of inspissated mucus, which at those times made the eye feel stiff and uneasy; and the eyelids were usually gummed together when she awoke in the morning. On examining the eye, an excoriation was perceived on the edges both of the upper and lower lids, and on gently pressing my finger on the lachrymal sac, which appeared fuller than in its natural state, a few small particles of inspissated mucus were discharged through the puncta lachrymalia, and spread over the eye. I endeavoured to inject some warm water through the inferior punctum into the nose; but the obstruction in the nasal duct was so great that none would pass, the whole of the liquor returning immediately through the superior punctum. A little of the Unguentum Hydrargyri Nitrati was applied with a camel's hair pencil to the excoriated edges of the eyelids, and a weak vitriolic Collyrium was directed to be used three or four times in
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the course of the day. The injection of warm water, together with the application of the ointment, were repeated several days in succession. On the eleventh, the watering of the eye was less troublesome. On the fifteenth, a part of the injected liquor evidently passed both into the nose and throat ; as it did also on the three following days ; the flow of tears over the cheek being considerably diminished. On the nineteenth, the patient caught cold at the opera ; in consequence of which, the Epiphora immediately returned, and was accompanied with a small degree of inflammation on the ball of the eye. The next day no part of the injected liquor would pass through the duct. I scarified the schniderian membrane, on the inside of the nose, with the point of a lancet, and took away two or three tea spoonfuls of blood ; an opening medicine was administered ; and a saturnine lotion applied to the eyes. On the twenty-first, the inflammation of the eye was removed ; but still none of the injected liquor would go down. I introduced

introduced the end of a small gold probe through the superior punctum lachrymale, and gently pushed it on, in the direction of the duct, but it would not pass. On the twenty-second I repeated the attempt, and it now went freely into the nose; after which some warm water, injected through the inferior punctum, also passed. The watering of the eye gave very little trouble for several days after this time: but in about a week the obstruction to the tears returned, together with an inflammation on the ball of the eye, and a small tumefaction in the lachrymal sac. Both the patient and myself were much discouraged by this relapse; and I now proposed to her to allow me to make a puncture into the sac, and to introduce a style, in the way that has been described in the preceding pages. Agreeably to this advice the operation was performed on the 7th of August; and, with very little pain or difficulty, a probe was first introduced, and afterwards a nail-headed style, an inch and three-eighths in length, through the nasal duct

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into the nose. August 8th, the young lady had not experienced any pain, and the inflammation of the eye was abated. August 9th, I withdrew the style and injected some warm water through the wound. It passed freely into the nose; after which the style was replaced with as much ease as it had been at first introduced. August 10th, the watering of the eye was greatly diminished; and the eye, in every respect, much more easy than it had been for many months before the operation. The style was withdrawn and replaced every day for about a week, and afterwards every second or third day until the 30th of the same month, when the patient left London, being perfectly able to manage the operation: which she repeated every four or five days, in order to keep the style clean and the passage clear.

On the 16th of August, 1797, she informed me by a letter, “ that her eye
 “ had been effectually relieved by the in-
 “ troduction of the style; that she had
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“ then worn it without the smallest inconvenience above a year ; and that she should certainly continue it until she had an opportunity of seeing me.”

CASE II.

An Epiphora, produced by an old obstruction in the lachrymal canal, which, like the former, was speedily cured by the introduction of a nail-headed style through the nasal duct.

The daughter of I. P., thirteen years of age, was recommended to me August 14th, 1797, by Mr. Moore, Apothecary, in Norfolk-street, Strand, on account of a constant watering of the right eye. It had been troublesome to her ten years, and began during the time she had the small pox ; which disorder had produced a violent inflammation in both her eyes. When I first saw her, the edges of the lids of both eyes, and particularly of the right, were considerably excoriated ;
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and her sight was so extremely weak, that she had long been unable either to read, or to work with her needle. The right lachrymal sac was distended with a considerable quantity of thick mucus, which often returned through the puncta lachrymalia over the eye; and not unfrequently she was obliged to discharge it by the pressure of her finger. I injected some warm water through the inferior punctum, but could not observe that any of it passed into the nose. The obstruction was so compleat, and it had continued so long, that it appeared to me in vain to attempt to clear the duct by a continuance of this mode of treatment. I, therefore, proposed to the mother of the girl, to permit me to puncture the sac with a spear-pointed lancet, as had been done in the preceding case, and to introduce a nail-headed style. The mother and daughter acceding to the proposal, the operation was performed the same day, and a style was introduced without any difficulty, through the duct into the nose. The head of the instru-

ment being blacked with sealing wax, no dressing was necessary over it ; and the eye was no otherwise defended from the light than by the use of a common shade. August 15th, the eye was not in the least inflamed, and the patient had not suffered any pain since the time of the operation. A little of the Unguentum Hydrargyri Nitrati Rubri was applied with my finger to the excoriated edges of the eyelids, and was wiped off immediately afterwards. August 16th, I withdrew the style, and injected some warm water through the aperture ; the whole of which passed at once either into the nose or throat ; after which the style was introduced again as before. This operation was repeated daily until August 23d, when the watering of the eye had wholly ceased, and the sight of the patient was become as strong as that of other persons. The style was continued in the duct until the 2d of October, being retracted only once or twice in the week, in order to inject some water through the passage.

passage. At this time it appeared to me that the lachrymal passage was sufficiently established to allow the instrument to be withdrawn entirely. This was accordingly now done, and the wound suffered to close; after which the Epiphora did not return, and the sight continued perfectly strong and useful.

CASE III.

An old obstruction in the lachrymal passage of both eyes speedily removed by the introduction of a style into each.

The daughter of I. Millar, servant to Mr. Fell, Corn-factor, on the Bank-side, Southwark, about twelve years old, was brought to me on the 26th of July, 1797, on account of a considerable watering of her eyes, accompanied with a dilatation of both the lachrymal sacs, and the frequent regurgitation of a thick matter through the puncta lachrymalia over the eyes. The

girl had had the small pox very favourably when an infant ; but afterwards the left eye was much inflamed, and a considerable opacity took place in the Cornea ; which, though diminished, was still visible. The watering of the eye did not come on till she was seven years old. It began, without any known cause, first in the right eye ; and in six months afterwards, in the left also. The disorder was much increased whenever she caught cold, and was often accompanied, as at the time when I first saw her, with an accumulation of thick matter in the lachrymal sacs. The eyes being occasionally inflamed, she had been advised by a gentleman in the city to drop some Laudanum into them, but was not sensible of its having done her any good. In this instance it appeared to me to be in vain to try inferior modes of cure. I, therefore, immediately advised that a style should be introduced through the obstruction in each duct. On the 27th, I punctured the right sac, and without any difficulty introduced a style, an inch and
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an eighth in length. No inflammation followed the operation. It was withdrawn daily for about a week, and some warm water injected. At the end of this time the discharge of tears ceased to give trouble. On the 7th of August I punctured the left lachrymal sac, and introduced a style through this duct, with as much ease as it had before been carried through the right duct. On the 9th, there was not any matter retained in either of the lachrymal sacs; and the girl informed me that neither the right nor left eye had watered more than four times in the preceding day. August 12th, there was a slight discharge from the aperture in the left sac, but none from that in the right. Her sight was now quite strong. She went to school; performed the usual school business with ease; and did not find the smallest inconvenience from the lodgement of the styles; the heads of which being small, and covered with black sealing-wax, were scarcely to be perceived. They were permitted to re-

main between two and three months ; when the lachrymal passage appearing to be perfectly restored, they were withdrawn. The wounds closed immediately ; and the girl has not had any trouble from the watering of her eyes since this time.

CASE IV.

Introduction of a nail-headed style, with immediate success, after the failure of a metallic tube.

A daughter of Mr. G. in Great Marybone-street, about eight years of age, had been afflicted with a watering of the right eye, ever since she was a year old, which first took place after the small pox. She had this disorder in a very slight manner ; but, a pustule happening to form on the edge of the eyelid, it seems probable that the inflammation which it excited was continued to the membrane which lined the lachrymal canal. When she was three
years

years old, an abscess formed over the lachrymal sac; in consequence of which she was taken to a surgeon at the west end of the town, who opened the tumor with a lancet, and proposed to the mother to insert a tube in the nasal duct. At this time the parents of the child would not consent to have the operation performed; and for two years the abscess repeatedly broke and healed. When the child was five years old she was brought to me, during one of those seasons in which the abscess was full of matter. I was then of opinion, that the insertion of a hollow tube in the nasal duct was the most likely method of curing the disorder; and therefore I recommended this operation to the parents of the child, without knowing that the same advice had before been given by another surgeon. The parents now consented to have the operation performed. I therefore made a large opening into the sac, and introduced a tube with a tip, or projection, at the top, to hinder it from sinking too low, and two projections or shoulders,

shoulders, at a small distance from one another, to prevent it from rising too high. Within three days after the tube was inserted, the wound was healed, the tears passed freely into the nose, and the watering of the eye wholly ceased. She continued well about a year; but at the end of this time a thick mucus was frequently accumulated in the lachrymal sac, which she was unable to press downward into the nose. She was therefore obliged, by pressure on the sac, to force it back through the puncta lachrymalia over the eye. The watering of the eye also returned in a small degree; though it was not now nearly so troublesome as it had been before the tube was inserted. The eye continued in this state nearly two years; when the girl, who was nearly seven years old, received a violent blow on her face, which occasioned a great swelling of the nose; and, the next morning, the lower part of the tube, which seems to have been broken from the upper part at one of the shoulders above mentioned, was discharged

through the nostril. About a fortnight after this, an inflammation commenced over the lachrymal sac, which soon discovered a tendency to suppurate. She was now taken to Mr. Underwood, in Great Marlborough-street, who at first gave her an eye water, but afterwards recommended a bread and milk poultice to promote the suppuration. This soon caused the abscess to break; and as the wound did not heal, Mr. U. accompanied her to me for further advice. On examining the wound with a probe, I felt the top of the tube steadily fixed in the upper part of the duct; and it appeared highly desirable, in the first place, to extract it. A large aperture was therefore made with a lancet directly over it; and, after repeated attempts, I at length succeeded in securing it between the blades of a small forceps, and thus brought it away. A style, an inch and an eighth in length, with a broad nail-head was then introduced; after which the swelling of the integuments quickly subsided, the watering of the eye ceased, and the sight became

became as strong as that of the other eye. In about a week the wound was contracted to a fistulous orifice that was but just large enough to admit the introduction of the style. I therefore now made use of one that had but a small head; and within a fortnight took leave of the patient, having instructed her mother to withdraw the style once in a week; and to inject some warm water through the duct, in order to hinder any inspissated mucus from collecting round the instrument.

CASE V.

Introduction of a nail-headed style, with immediate success, after the extraction of a metallic tube which was become obstructed and injurious.

Mrs. B. about fifty years of age, was attacked, in the year 1790, without any known cause, with an almost constant effusion of tears over the left cheek, which effusion was not unfrequently accompanied with a
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slight inflammation of this eye. After it had continued about six months, as the inconvenience it occasioned rather increased than lessened, she came to town and put herself under the care of Mr. Wathen and myself*. At that time both of us had a high opinion of the efficacy of a metallic tube inserted in the nasal duct for the cure of this disorder. It was accordingly proposed; and on the 13th of December, 1790, the operation was performed. The adjustment of the tube to the duct in this instance, gave more trouble than we had usually experienced; but, after a few days, it fully answered the purpose of conveying the tears into the nose, and the watering of the eye ceased. The lady continued well after this time until the beginning of the year 1793; when in consequence of her experiencing some slight uneasiness in her eye, some warm water was injected through the in-

* The partnership between Mr. Wathen and me did not terminate until March 1791.

ferior punctum lachrymale; but the obstruction in the tube was so considerable, that none of it appeared to pass into the nose or throat. Notwithstanding this obstruction, the watering of the eye at this time occasioned so little inconvenience, that it was not thought advisable to propose any particular remedy for it. The eye continued nearly in the same state about six months; but then the Epiphora became again troublesome, and it was frequently accompanied with a slight inflammation of the eye, very similar to that which the patient had experienced before the tube was inserted. In October, 1793, the uneasiness increased; the inflammation was more than ordinarily severe; and an abscess formed over the lachrymal sac. In consequence of this she consulted Mr. Andrews, her family surgeon, at Rumford, who, being informed of the insertion of the tube, advised her to consult either Mr. Wathen or me, on the measures that were necessary to be now adopted. Mrs. B. accordingly came to town on the 30th of October,

October, and called on me in New Bridge-street. The abscess at this time had burst, and a small aperture was formed directly over the entrance of the nasal duct. On introducing through the aperture the round end of a probe, I very readily felt the top of the tube, and endeavoured to carry the probe through it; but its cavity was so compleatly filled, that I found it impossible to accomplish my intention. The lady expressed a great desire to have the tube withdrawn; and as it appeared now to be incapable of answering the purpose for which it was introduced, I acceded to her wish, and enlarged the aperture, in order to give room for the introduction of a forceps with which it might be secured. After making repeated attempts with this instrument, I, at length, succeeded in bringing it away; and on examining the tube its cavity was found to be filled with a black solid substance, which appeared to be chiefly formed of inspissated mucus. Some warm water was injected through the wound, and, being afraid to trust to
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the continuance of the communication without the insertion of a solid body through it, I introduced, in place of the tube, a part of a common probe, about an inch and a half long, which was bent at its superior extremity, in order to hinder it from passing too low in the duct. On the following day the inflammation of the eye was much abated, and the patient informed me that the discharge of tears over the cheek had been much less troublesome than on many of the preceding days. On the third day the watering of the eye had wholly ceased, and the sight was become quite strong. I now withdrew the probe; and again injected some warm water; after which the instrument was replaced as before. When the probe was first introduced, it was my sole intention to employ it for a short time, in order to prevent the nasal duct from suddenly closing; which it was to be feared might have happened after the tube was extracted. I had not any expectation that the watering of the eye would wholly cease, so long as a solid

solid body continued in the duct. Being agreeably disappointed in this respect, I determined to continue the style a longer time than was at first intended; and, instead of bending the upper end of the instrument, it was suggested by Mr. B., that if it had a head, like that of a nail, placed obliquely so as to fit close to the skin, it would be less likely to slip or be struck; and, if it were enamelled, so as to resemble the colour of the skin, it would be less observable. A style of this kind was accordingly substituted for the bent probe; and it has now been worn upwards of four years, being only withdrawn once or twice in a week to inject some warm water through the passage; and, during the whole of this time, the lady has not experienced the smallest inconvenience from the watering of her eye, nor has she had the least inclination to omit wearing the instrument.

The case above related was the first that came under my notice, in which the effi-

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cacy of a solid style to guide the tears into the nose, appeared to me sufficiently satisfactory to convey an idea that it might become a general remedy in the treatment of the *Fistula Lachrymalis* *. But this case, considered alone, was not sufficient to justify a confident expectation of this kind ; since the duct was dilated by the long continuance of the tube within it ; and, the style being smaller than the cavity formed by the tube, it may readily be supposed, there might be room left for the tears to pass down by its side. Opportunities, however, soon offered to try the effects of a similar treatment in other instances of this disorder. An account of many of these is given in the present tract ; and in most of them the only aperture made in the obstructed duct was formed by an instrument no larger than the style itself. In

* I remember one instance, indeed, not wholly unlike to this, which occurred many years ago, during the time that Mr. Wathen and I were engaged in business together ; but neither of us at that time paid sufficient attention to the case to make any practical use of it.

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these cases, no less than in that which has just been related, the watering of the eye almost immediately ceased, as soon as the style was properly introduced through the duct.

CASE VI.

Introduction of a nail-headed style through a metallic tube, inserted in the nasal duct; which tube was become obstructed, and could not be extracted.

A. G. sixty-four years of age, a workman in Mr. Seddon's warehouse, in Aldersgate-street, was first attacked with a watering of the left eye about six years ago. For three years the only trouble it gave him, arose from the necessity of often wiping away the effused tears; but at the end of this time an abscess formed over the lachrymal sac, which obliged him to ask advice from a surgeon. When the suppuration was compleat, the abscess was opened by a gentleman in the city, who

afterwards inserted a metallic tube in the nasal duct ; in consequence of which, he became very quickly quite well, and for six months had not any trouble from the watering of the eye. At the end of this time, however, the obstruction returned ; and, shortly afterwards an abscess again formed over the lachrymal sac, which was accompanied with a considerable inflammation of the Tunica Conjunctiva. The operation of introducing the tube into the nasal duct had given the patient so much pain, that he did not chuse to repeat his application to the gentleman who performed it ; but came, by the advice of a friend, to beg my assistance. The abscess had burst directly over the entrance of the duct. I, therefore, enlarged this aperture, and then endeavoured, with a small but strong pair of forceps, to extract the tube. After repeatedly introducing the instrument for this purpose without success, I, at length, determined to try the effect of inserting a slender style, an inch and three-eighths in length, with
a nail-

a nail-head, through the^e tube ; which operation was accomplished with ease ; and the next day the inflammation of the eye was less, and the discharge of tears considerably diminished. The style was now withdrawn, and some warm water injected through the tube into the nose ; after which it was replaced as before. In about a week his sight became as strong as it ever had been ; and from that time to the period when I draw up the present statement of his case, which is upwards of two years, he has not had any return either of inflammation, pain, or watering of the eye. He takes out the style once every week, and injects some warm water through the tube ; after which he immediately replaces the instrument, and has never experienced the smallest obstacle to its passing, or the least inconvenience either from it, or from the tube, which still continues fixed in the nasal duct.

CASE VII.

Cure of an obstruction in the nasal duct, which had produced a troublesome ulceration in the integuments that cover the lachrymal sac.

Mr. P. a merchant at Manchester, about thirty years of age, began first to experience uneasiness from the watering of one of his eyes in the year 1790; but as it gave him no other trouble than that of often wiping away the tears, it was not particularly attended to until November, 1794; when, in consequence of his taking a violent cold, an inflammation took place over the lachrymal sac, which speedily advanced to a suppuration; and the abscess at length burst through the integuments a little below the entrance of the nasal duct. In a letter with which I was favoured by Dr. Taylor, of Manchester, he informed me “ that the opening being too
“ small, it was enlarged with a lancet,
“ but care was taken to avoid wounding
“ the

“ the sac; and, in three weeks or a
“ month after this enlargement, the sac
“ of itself gave way, and the discharge
“ then, for the first time, became watery
“ and mixed.” The disorder remained
in this state several weeks. The tears
continually issued through the wound, and
were often blended with a thick mu-
cus; the integuments over the sac were
much thickened, and had a yellow ap-
pearance; and the eye was always uneasy.
In this state he came to London, and put
himself under my care. The aperture
that was formed in the sac was too low to
admit the passage of a probe through it
into the nasal duct. Without paying any
regard therefore to this wound, I made a
puncture, with a spear-pointed lancet, di-
rectly over the entrance of the duct, and,
after passing a probe through it, which was
accomplished with very little difficulty, I
immediately introduced a nail-headed style,
and left it there. On the following day,
the watering of the eye was much less
troublesome than it had been for a long
time

time prior to the operation, and there did not appear to be any increase of inflammation. On the third day I withdrew the style, and injected some warm water, after which the style was replaced as before. Within a week from this time the old wound was compleatly healed, and the aperture which had been made with a lancet became a fistulous orifice, just large enough to admit the style to pass through it. The patient shortly afterwards returned to Manchester, with directions to withdraw the style every two or three days, in order to inject some warm water through the duct. It was worn, in the whole, about ten weeks; but towards the latter part of this time, it often slipped out imperceptibly; and as the effusion of tears did not give any trouble, the aperture was then suffered to close. More than two years have elapsed since the cure, and there has not been the smallest tendency to a return of the disorder.

CASE

CASE VIII.

Cure of a watering of the eye, which was accompanied with a fixed tumor over the lachrymal sac.

A young woman, who had the care of the nursery in a merchant's family in Finsbury-square, applied to me in December 17th, 1796, by the recommendation of Mr. O'Donnel, apothecary, in Great Marlborough-street, on account of a watering of the left eye, which had been troublesome to her ever since she was a child, and was now accompanied with a fixed tumor over the lachrymal sac, and a constant uneasy heat in the eye and side of the nose, but without any apparent inflammation in these parts. The tumor began between two and three years ago, and within the last five months it was become so large as to be visible to every person who looked at her. It seemed to contain a fluid; but pressure did not produce any effect upon it, either in sending its contents into the nose,

or

or in making them regurgitate through the puncta lachrymalia. The effusion of tears, at the time she consulted me, was more than ordinarily troublesome, as was also the sense of heat in the ball of the eye. Being doubtful as to the nature of the swelling, I at first only advised her to foment the eye night and morning with an infusion of chamomile flowers, and afterwards to rub it with a small portion of the common mercurial ointment. At the end of a week, I flattered myself the size of the tumor was somewhat reduced. She was directed to continue the same applications, and to wash the eye three times in the day with a weak vitriolic lotion. I did not see her after this time until February 7th, when the tumor appeared to me to be as large as when I first saw it. Some warm water was now injected through the punctum inferius; but none of it passed into the nose. I also endeavoured to pass a probe from the superior punctum through the duct, but the obstruction was so great that it could not be accomplished. In this state
of

of the disorder, I proposed to the patient to permit a puncture to be made into the tumor, in order both to make me acquainted with the nature of its contents, and to shew whether, by diminishing its size, the lachrymal passage might not be made pervious. Accordingly, on the 9th of February the tumor was punctured with a spear-pointed lancet, and a gelatinous yellow fluid discharged. I afterwards endeavoured with the blunt end of a probe to find the entrance of the nasal duct ; but could not discover it. On the 11th, there was not any inflammation, and only a small discharge of matter from the aperture that had been made. On the 13th, the quantity of matter discharged through the wound was considerable ; and the patient experienced a great degree of pain. A bread and milk poultice was applied. On the 15th, an erisipelatous swelling came over the whole of the left side of the face, and much matter was still discharged through the wound. On the 20th, the discharge was diminished, and the inflammation much abated.

abated. The watering of the eye also was not quite so troublesome as it had been before. On the 27th there did not appear to be any inflammation, but much matter came from the wound. The blunt end of a probe was again introduced through the aperture, and now, without the least difficulty, it was carried through the nasal duct into the nose; immediately after which I withdrew it, and with equal ease introduced a nail-headed style of the same size. March 1st there was scarcely any inflammation of the eye, or any discharge of tears. The lodgement of the style in the duct had not occasioned the smallest degree of pain or uneasiness. It was afterwards daily withdrawn, for a short time, in order to make room for the injection of some warm water. On the 4th, the watering of the eye had wholly ceased, and the sight was become quite strong. The wound in the sac was so much contracted, that it was but just large enough to admit the end of the style. After this time she did
not

not experience the least trouble from her eye ; and on the 25th of August she called upon me to ask if the use of the style might not be omitted. As it had been worn above six months, it appeared to me probable that the nasal duct would now continue pervious without using it. I therefore acceded to her proposal, and withdrew it entirely. The aperture closed almost immediately ; she had not any return of the watering of her eye afterwards ; and her sight has since continued perfectly strong and useful.

CASE IX.

Cure of an obstruction in the nasal canal, produced by a constitutional humor, and occasioning repeated suppurations in the lachrymal sac.

Mr. A. thirty-five years of age, was attacked, about seven years ago, with a violent eruption in his face, neck, and shoulders, which spread in many parts into large sores, and was supposed to

originate from a scrophulous habit. He took a considerable quantity of Peruvian Bark, and other medicines, and afterwards passed some months at the sea side, without experiencing the least assistance from them. After this he was put upon a mercurial course; under which process, in a short time, the wounds began to heal, and by continuing to employ it, the eruptions entirely disappeared; but they left a watering of the left eye, which was so troublesome that it obliged him almost continually to keep the handkerchief applied, in order to wipe off the tears that fell over the cheek. He suffered no other inconvenience from it until February, 1797, when an inflammation and swelling suddenly took place over the lachrymal sac, accompanied with a violent pain in this part. The tumor speedily advanced to a suppuration, when it broke; and the patient became apparently well. Within a week, however, the inflammation and pain returned with their former violence; and in a short time the skin again broke, considerably

considerably below the entrance of the nasal duct. In this period of the disorder he put himself under my care, on the 11th of March 1797, by the recommendation of his apothecary, Mr. Farley, in Holbourn. I advised him to foment the eye for a day or two, with a strong decoction of poppy-heads, and to continue the application of a bread and milk poultice on the tumor, in the same way he had done before. On the 13th, the inflammation and effusion of tears were much abated, and the swelling of the sac subsided so much, that I was inclined to hope the lachrymal canal might again become pervious, without requiring the performance of any operation. But on the 18th, the eye became inflamed a third time, and another accumulation of matter took place in the lachrymal sac, which in a day or two was discharged in the same place as before. On the 21st, therefore, without paying any regard to this aperture, I made a puncture into the sac with a spear-pointed lancet directly over the entrance of the duct; after which

I introduced

I introduced the blunt end of a probe, and found the obstruction in the duct so considerable, that it was impossible, without using a greater degree of force than appeared to me proper, to push the instrument through it into the nose. I therefore withdrew the blunt end of the probe, and introduced that which was sharp; with which, without any difficulty, I perforated the thin part of the *Os Unguis*, which occasioned a few drops of blood to escape from the left nostril. I withdrew the probe, and introduced immediately a nail-headed style, which, being of a size somewhat smaller than that of the probe, passed through the new aperture with ease. On the 23d, the style was withdrawn, and some warm water injected. It passed freely into the nose; after which the style was replaced. This operation was repeated every day for a fortnight, at the end of which time the effusion of tears was inconsiderable; but the inflammation of the eye continued, and the edges of the wound, through which the style was introduced

duced were extremely fore, and appeared to spread. Different sorts of Collyria were employed, but they did not effect any change. It at length occurred to me, that the obstinacy of the disorder might be occasioned by a part of the same humour remaining in the habit, which had been found so difficult to subdue when the obstruction in the lachrymal passage was first perceived. I therefore recommended a quarter of a grain of Hydrargyrus Muriatus, dissolved in half an ounce of spirit of nutmeg, and mixed with a basin of thin gruel, to be given every night at bed-time. Within three days after this plan was adopted, the inflammation of the eye began to abate ; and within a fortnight it was wholly removed. The foreness of the wound, through which the style was introduced, was also gone ; and this aperture was soon reduced to a size no larger than was sufficient to allow the instrument to pass through it. More than six months have now elapsed since the cure was completed ; and during this time the patient

G

has

has not experienced the slightest inconvenience from the use of the style, which he withdraws only once in the week, and replaces with great facility.

CASE X.

I am favoured with the following case by Mr. Green, Surgeon at Peckham; who drew it up, in compliance with a request I made him for this purpose, in order to introduce it in the present work.

“ Mrs. S., in the year 1793, was suddenly attacked with an apoplectic fit,
 “ whilst standing at the top of a flight
 “ of stairs; in consequence of which
 “ she fell down several of them, and
 “ by the fall one of her teeth was beat
 “ out, and the left side of her face much
 “ bruised. She soon recovered her recollection;
 “ but, for a considerable time afterwards,
 “ was deprived of the use of
 “ her limbs on that side. The sight of
 “ the left eye also became dim; her left
 “ nostril was peculiarly dry; and she had
 “ frequent

“ frequent troublesome itchings in the
 “ left eyelids. In the beginning of the
 “ year 1795, she caught cold by going on
 “ the water ; in consequence, of which the
 “ left eye and eyelid became inflamed,
 “ and a tumor began to form about the
 “ middle of the under lid, attended with
 “ a hardness nearly resembling that of
 “ a stone. The inflammation extended
 “ over the lachrymal sac, and the whole of
 “ that side of the nose ; and the passage for
 “ the tears was so entirely stopped, that
 “ this fluid trickled continually down the
 “ cheek. By the use of fomentations
 “ and poultices, together with the adminis-
 “ tration of Cicuta, &c. the tumor at length
 “ was brought to a suppuration, and burst.
 “ The edges of the sore however were
 “ very hard, and had an unpleasant car-
 “ cinomatous appearance. She still suf-
 “ fered violent excruciating pain ; and her
 “ distresses were much increased by her
 “ being at that time between seven and
 “ eight months advanced in her preg-
 “ nancy. In this state of the case I re-
 “ quested you to see the patient with me

“ on the 28th of March. We enlarged
“ the aperture with a narrow-bladed
“ curved knife, and carried the incision
“ into the lachrymal sac. A few days
“ afterwards, I attempted to pass a thin
“ bougie through the Ductus ad Nasum ;
“ but the wound was in such an irritable
“ state, that I was obliged to desist with-
“ out accomplishing the object I had in
“ my view ; and, although the patient had
“ experienced relief from the violence of
“ the pain she before endured, by the en-
“ largement of the aperture, the wound
“ had still a very unfavourable aspect, and
“ the tears continually trickled down the
“ cheek. About the end of April, 1795,
“ the operation you proposed was per-
“ formed. The old wound being con-
“ tracted in size, and situated in the in-
“ ferior part of the lachrymal sac, an
“ aperture was made into this cavity with
“ a spear-pointed lancet directly over the
“ entrance of the nasal duct ; immediately
“ after which the end of a nail-headed
“ style was introduced into the aperture,
“ and

“ and conveyed through the duct into the
 “ nose. From this time the wound put on
 “ a more favourable aspect, and the tears
 “ passed through their natural course. The
 “ style was withdrawn every second or third
 “ day, and some warm water injected.
 “ The old wound was dressed, as you de-
 “ sired, with the Ceratum Album, mixed
 “ with a third part of the Flores Zinci; and
 “ its edges were occasionally touched with
 “ the lunar caustic. Mrs. S. was brought
 “ to bed in June, and had an easy natural
 “ labour. Being afterwards in a very
 “ weak state, she returned to the use of
 “ Bark and Cicuta; and the old wound
 “ did not compleatly heal until the end
 “ of the year. The watering of the eye,
 “ however, totally ceased soon after the
 “ style was introduced; and at the present
 “ time, which is two years since the
 “ operation was performed, she continues
 “ perfectly well. There is not the smallest
 “ hardness in the eyelid; the scar is very
 “ little perceptible; and, as to the style,
 “ she scarcely thinks it an inconvenience.”

These ten cases, I flatter myself, will be sufficient to elucidate the observations that have been offered in the preceding pages, and to evince the propriety of the treatment which I have taken the liberty to recommend.

THE END.

ON THE
TREATMENT
OF
HÆMORRHOIDS.

B

ON THE
TREATMENT
OF
HÆMORRHOIDS.

By the term Hæmorrhoids, or Piles, is generally understood a morbid state of the blood vessels that are situated in the internal surface of the Intestinum Rectum, near the termination of this gut in the aperture of the Anus. They are distinguished by authors into those that are blind and those that are bleeding. When one or more of these vessels are only distended, they are denominated blind or tumified Piles; but when there is an aperture in them through which blood is discharged, they are called open or bleeding Piles. They are also distinguished into those that are external or visible, and those that are internal or concealed; these last, however, being usually visible, after the fæces have been discharged; although in a short time they

they become concealed, by the contraction of the Rectum within the Sphincter Ani. The blind Piles are sometimes so soft and thin, as evidently to be formed by distended or varicous blood vessels; but, more commonly, they appear to be occasioned by a thickening of one or more of the plicæ or folds in the internal membrane of the Rectum; which folds in this part of the intestine are usually numerous. The bleeding piles are seldom painful; and the blind piles, when painful, often become easy, as soon as a discharge of blood takes place from them.

The hæmorrhoidal evacuation is generally thought to be produced by an effort of nature to amend the constitution. There are many whose health is never so good as when they have a regular return of this hæmorrhage; and, on the contrary, serious disorders of different kinds have been observed to come on, when this discharge has been hastily suppressed. Every prudent practitioner, therefore, will proceed
with

with great caution, and will carefully consider the accompanying symptoms before he uses means either to stop or check it. Various circumstances, however, may arise, which render a medical interference indispensably necessary; and, among these, two of the most important, and those to which I mean particularly to direct the attention of the reader at this time, are the extreme pain and irritation, which hæmorrhoidal tumors occasionally excite, and the inability they produce, in the persons who are troubled with them, to prosecute in a proper manner, the usual concerns of life.

A costive state of the bowels, and the difficulties that attend the expulsion of indurated fæces, are among the most common causes of hæmorrhoids. A compression on the blood vessels of the Abdomen, by tumors within this cavity, as by the gravid uterus, by the enlargement of the liver or of any of the other viscera, or by the accumulation of water within the peritonæal tunic, is another not unfrequent cause of

this disorder. When hæmorrhoids are occasioned by the gravid uterus, they are usually cured by the delivery of the child; and when the Ascites produces them, the remedy consists in the discharge of the contained water;—but it rarely happens that they admit of a cure so long as abdominal tumors of any kind continue to impede the free course of the circulation. Gently laxative medicines, and an horizontal position of the body, will do some service in alleviating the uneasiness they occasion. The application of an ointment, composed of equal parts of the powder of oak galls and of elder ointment or hog's lard, has also contributed to answer a similar purpose. The application, again, of hot water to the affected part, by means of a bidet or semicupium, though at first sight it may seem a remedy of a nature contrary to that of the ointment of galls, has occasionally afforded much ease, by taking off the tension of the tumified gut; and occasionally it has excited a discharge of blood from the distended vessels. To effect

fect a similar purpose, leaches have sometimes been applied on the verge of the Anus ; and, at other times, the dilated hæmorrhoidal vessels have been punctured with a common lancet. The former of these operations has in some instances afforded relief ; but the hæmorrhage which the latter occasions is, in general, considerable ; and, as far as my observation extends, it has very rarely alleviated the pain of the patient.

When the remedies that have been mentioned have been tried without success,—when the patient is disabled from pursuing his usual occupation,—and the pain which the hæmorrhoids occasion is both violent in degree and frequent in returning,—it becomes indispensably necessary to have recourse to other means of affording assistance ; and the only ones I recollect, that have been proposed by authors since the use of the cautery and caustics has been relinquished, are—the operations of extirpating the whole of them ;—either by cutting them

off with a scalpel or scissars,—or by tying a tight ligature round their basis, in order to deprive them of nourishment, and thus to cause them to die and fall off. These operations, though less dreadful than those that are relinquished, are still formidable in no small degree. The former, if the tumors are large, makes a wound of considerable extent, and risks a hæmorrhage, which has sometimes been very difficult to suppress; and the latter brings on a severe pain, which has continued many days, before the portions that are included within the ligatures have separated and come away.

Before a recourse is had to either of these operations, it may be of use to recollect, that though the number of hæmorrhoidal tumors protruded through the anus is often considerable, yet the pain which the patient suffers is not produced equally by all of these. If an accurate enquiry be made, I believe, it will be found that the patient will point to one,
or

or at most to two, of the tumors, from whence all his pain proceeds. When these are examined, it will be discovered that they are much harder and more inflamed than the rest; and generally they are also smaller and less prominent; protruding but just low enough to be compressed by the sphincter ani.

If this be a just description of the state of the disorder, it follows, that the operations I have mentioned, as being in common use for its cure, when more easy means have failed of effecting it, viz. that of cutting off the whole number of hæmorrhoids with a scalpel or scissars, and that of tying a ligature round them, in order to cause them to die and fall off, are both alike unnecessary. Instead of having recourse to these severe remedies, we have only to direct our attention to the hard inflamed tumor, which is the cause of the pain, and which is not unfrequently situated in the center of the rest. This is often no larger than the end of the little
finger,

finger, and the removal of it, almost instantly abates the pain, and, in a short time, causes the rest of the tumors to collapse and disappear. The mode in which I have performed the operation in a great variety of cases, with perfect success, is simply this. Having secured the little hard tumor, which, as above-mentioned, is often situated near the center of the rest, and much darker coloured than they are, with a common dissecting hook, or forceps, I snip it off as close to its basis as possible, with a sharp pair of curved scissors. The pain which the operation occasions is really trifling; and the hæmorrhage which follows is so slight, that I have rarely had occasion to use any application to check it. If the hæmorrhoids are constantly protruded, the operation may be performed at any time; but if they only appear after the fæces are voided, that opportunity must be chosen for this purpose.

In those cases where the pain produced
by

by hæmorrhoids has not been violent, but where there is a constant distressing uneasiness, with frequent returns of a profuse hæmorrhage (which hæmorrhage sometimes debilitates the patient to so great a degree that his strength is nearly exhausted) an operation similar to that I have described will not unfrequently be sufficient, in an easy manner, to effect a radical cure of the disorder. In cases of this description, as well as in those before-mentioned, a careful enquiry will often discover, that one, or at most two of the hæmorrhoids are alone productive of these effects, and alone require to be removed; the excitement and protrusion of the rest being merely the effect of the irritability which these occasion.

The procidentia ani which accompanies hæmorrhoids usually ceases as soon as this disorder is cured. It sometimes takes place also from mere weakness in the intestinum rectum. Those who are old are particularly subject to this procidentia; but it happens

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pens

pens occasionally to persons of all ages. A very large portion of the rectum is sometimes protruded in infants ; and if it be suffered to remain long in this unnatural position, it is liable to become much inflamed, and even gangrenous. When a surgeon is called to a case of this kind, no time should be lost, but the gut be returned to its proper position, as soon as possible, by the gentle and gradual pressure of the fingers ; after which a thick compress, so graduated in size as to adapt itself to the space between the nates, and steeped either in red wine, or in some astringent lotion, should be bound on the part with a T bandage, to hinder the gut from again protruding. When a bandage has been applied for the above purpose, the patient should be gentle in all his movements ; since a sudden change of posture is apt to vary the degree of pressure that the bandage makes, and to allow the bowel again to protrude ; in which case the pressure of the bandage on the tender gut has been found to do harm rather than service. In
some

some instances of the procidentia ani, the patients have been served by introducing into the rectum, morning and evening, a tent about two inches long, and as thick as the little finger, made of a candle or of some stiff cerate. So long as a tent of this kind preserves its consistency, it compresses the sides of the gut and hinders it from coming down; but when it is melted by the heat of the part it loses its efficacy; and therefore the application of the compress and bandage above described is necessary, at the same time that the tent is used, in order to assist its action. The internal administration of the medicine known by the name of Ward's Paste has also in some instances of procidentia been found useful to strengthen the debilitated bowel. This medicine is said to be composed of the following ingredients;

R.

Pulv. Piperis Nigri.

Radici Enulæ Campanæ sing. ℥i.

Seminum Fæniculi dulcis ℥iii.

Bene misceantur; tunc adde

c 2

Mellis

Mellis despumati.

Sacchari purificati fing. ℥ii.

Liquefiat mel cum saccharo, et bene misceantur cum pulveribus, in mortareo marmoreo, ut f. massa. Capiat æger magnitudinem nucis moschatae bis vel ter quotidie.

If the procidentia has been of long continuance it must be confessed, after all, that none of these means can be depended upon, as affording a certain security against the return of the disorder, not only after a costive stool, but on any quick or sudden motion of the body. In all these cases, it is the duty of the surgeon very accurately to examine the state of the protruded part; since, in some it has been found that a small portion of the gut has been evidently more tumified than the rest, and more tender when touched with the finger; the removal of which tumified part, in the way I have recommended common hæmorrhoids to be removed in the preceding pages, has occasioned the remainder to collapse, and the patient to become quite well.

Former

Former authors, and particularly Mr. Benjamin Bell of Edinburgh, seem to leave it, as a matter of indifference, whether hæmorrhoids be cut off or tied off. The violent pain which the operation of tying them occasions, and the continuance of this pain for two or three days together, are objections to the use of the ligature, which, in my own mind, I have never been able to overcome. At the same time the danger that is liable to arise from a profuse hæmorrhage, after cutting off so large a number of hæmorrhoids, as often protrudes in this disorder, is with many an objection of no small weight against the old mode of excision; although I believe this hæmorrhage may always be hindered from becoming seriously troublesome, if a due attention be paid to keep the patient cool, and to avoid hot liquors for the first day or two after the operation has been performed. I think, however, it must be admitted by every one, that, whether the danger be greater or smaller, it is considerably diminished by the alteration in the

mode of operating which I have taken the liberty to suggest in the preceding pages.

After the operation, a thick compress should be applied, wet either with cold brandy and water, or with a cold saturnine lotion; retaining it on the part with the usual T bandage. The patient should be directed to keep perfectly still; to lie rather cooler than usual in bed; and to take nothing, in the way of diet, that is either hot or strong. I remember only two instances, in a considerable number of this kind, in which further attentions were found necessary. In neither of these did any ill consequences follow, except the alarm from an hæmorrhage, which was quickly suppressed: and the history of one of them is given in the sixth case that will be found annexed to these remarks *.

* It may be of use to observe, that after the cure is completed, it is a salutary practice to wash the weakened part daily with cold water, by means either of a bidet or large sponge.

CASE

CASE I.

A gentleman in Birchin-Lane applied to me, about three years ago, on account of an hæmorrhoidal disorder to which he had been subject many years. For the last twelve months several large tumors were protruded through the sphincter ani whenever he had a stool, and afterwards they not only bled, but he was often for hours in so much pain, that he was unable to attend to any business. Many medicines had been given him, and different applications employed, but without affording him any assistance. On an examination I found a considerable number of hæmorrhoids protruded through the anus, all of which appeared to be in a state of inflammation; but one in particular was excessively tender, and felt quite hard when touched with the finger*. I stated

* It has been observed above, that hæmorrhoidal tumors are not unfrequently occasioned by a thickening of

stated to the patient my opinion, that this hard pile was the cause of the pain he endured, and that the removal of it was a highly probable means of giving him ease, and causing the other tumors to collapse. On the subsequent day I performed the operation in the following manner. Having secured the hard hæmorrhoid with a dissecting hook, and drawing it forward, I cut it off, with a curved pair of scissors, as close to its basis as I was able. The remainder of the tumors instantly collapsed, and withdrew within the sphincter; and, as they were quite soft, I did not think it necessary to search further for them. The pain the operation occasioned was much less than the patient had experienced for a long time after every motion. No hæmorrhage followed. I applied a compress dipped in a saturnine lotion over the anus, and bound it on with the usual

one or more of the plicæ or folds in the membrane which lines the inferior part of the intestinum rectum. I have reason to believe that this is much more frequently the cause of these tumors, than a varicous enlargement of any large blood vessel that is situated in this part.

T bandage.

T bandage. An uneasy sensation was experienced in the rectum, during the whole of the first day, but the patient slept well in the night, and the following day was perfectly easy. On the third day he took a gently opening medicine, which procured him two loose motions. These were mixed with a small quantity of blood; but gave him very little pain as they came away, and were followed with a very slight protrusion of the gut, which went back, immediately on the application of the finger. He had not any occasion to take medicines afterwards. The bowels in a short time performed their proper office without pain or protrusion, and he became quite well in every respect. For a year and a half he continued free from any uneasiness of the hæmorrhoidal kind; but then the gut began to have a slight tendency to protrude whenever he had a costive stool. He took particular care to avoid this by an attention to his diet, and by the use of gently purgative medicines. As this, however, did not hinder the gut from occasionally coming
down

down, he was advised to take the size of a nutmeg of Ward's Paste every morning and evening. He had not taken this medicine long before the tendency to a prolapsus entirely went off, and for the last two years he has not had the least uneasiness in this part.

CASE II.

Mr. B., a wine-merchant in the City, applied to Mr. Wathen and me, during the time we were connected together in practice, on account of a considerable number of hæmorrhoids which had been troublesome to him many years; and, for some months prior to the time of his consulting us, had often been so excessively painful, that, for hours after voiding his fæces, he was unable to move either from his bed or couch. On an examination I found the tumors very similar to those that are described in the preceding case. A considerable number of them was protruded through the sphincter ani; and, nearly
in

in the center of these was one, much smaller than the rest, which was excessively hard and painful, and very livid in colour. Having secured this hard tumor with a dissecting hook, we immediately removed it with a curved pair of scissars. No hæmorrhage followed the operation; and he became almost instantly easy. Nothing particular occurred in the subsequent treatment; and, from that period to the time of my drawing up this statement of his case, which is upwards of ten years, he has not had the smallest tendency to a return of the disorder.

CASE III.

Mr. D., a merchant in the City, about forty years of age, has been troubled with hæmorrhoids ever since he was seven years old; scarcely ever having had a stool, since this time, without the protrusion of one or more of them, which he has afterwards been obliged to return through the sphincter ani by the pressure of his

6 fingers.

fingers. They gave him, however, no further trouble till about three years ago, when, without any known cause, he was unable to keep them up, and they became so painful that he walked with difficulty ; and in a short time the pain increased to so great a degree, that he could neither sleep nor continue long in any one posture. In this state he sent for me. The case exactly resembled those which I have above related. In the midst of a large number of hæmorrhoids, there was one much harder and darker coloured than the rest, and excessively tender when touched with the finger. I gave him my opinion that the whole of his pain proceeded from this hard hæmorrhoid ; and advised him to have it removed. His consent was immediately given ; and I cut it off, together with a small hæmorrhoid near it, which seemed somewhat harder than the rest, the same evening. The operation gave him very little pain, and was not followed by any hæmorrhage. He became easy almost as soon as it was performed, and afterwards
passed

passed a very good night. No hæmorrhage took place, nor did any accident follow; and in a few days he was well enough to return to his usual business. There is however, still, as there has been from his youth, a protrusion of part of the gut whenever he has a stool; but this he returns with great facility; and, as it gives him no further trouble, he is not uneasy about it.

CASE IV.

Mr. B. applied to me, about twelve years ago, on account of an excruciating pain, produced by hæmorrhoids, which had then continued a week with scarcely any intermissions. On an examination I found, as in the preceding cases, in the midst of several hæmorrhoids, one much harder than the rest; which though small was nearly black. I desired him to strain, that this black pile might become more visible through the sphincter ani; when touching it with the end of my finger, he immediately

immediately exclaimed that this was the part from whence his pain proceeded. Previous to the present attack the patient had never been subject to any complaint of a similar kind, but had enjoyed in all respects a good share of health. I immediately removed the hard pile in the way above recommended; after which the pain very quickly abated. No hæmorrhage ensued, nor were any other dressings employed than the usual compress and bandage. Within a fortnight he was perfectly cured, and returned to his business. He did not experience any further trouble from this part till about twelve months ago; when he was again attacked with an agonizing pain similar to that he had before experienced; and a hard tender tumor was again protruded through the sphincter ani together with a number of others of a softer nature. He was now at a considerable distance from me; in consequence of which I had not an opportunity of attending to him in this illness. The gentleman he consulted recommended a free use of sulphureous remedies, together with
various

various softening ointments to be applied to the protruded tumors ; but a month had nearly elapsed before he experienced any lasting amendment from them. The pain then gradually went off, and the hard tumor disappeared ; since which time he has again enjoyed his usual health.

In this instance does it not seem probable that the removal of the hard hæmorrhoid would have prevented the patient a great part of the pain he endured, and have much shortened the time of his confinement from business ?

CASE V.

A lady who has borne many children, applied to me about three months ago, on account of a protrusion of hæmorrhoids through the sphyncter ani, which occasioned her a continual uneasiness in this part. The disorder commenced about three years ago, and was supposed to have been brought on by some active medicines which she took about that period. For a
long

long time the hæmorrhoids had been accustomed to bleed whenever she had a costive stool ; and for a month before she consulted me, not a day elapsed, in which she had not lost six or eight ounces of blood in this way ; notwithstanding which, there was very little diminution in her usual menstrual discharge. In consequence of the pain and loss of blood she was exceedingly reduced both in strength and size, and had entirely lost her inclination for food. On an examination I found, as above described, a considerable number of hæmorrhoids protruded through the sphincter ani ; two of which appeared more prominent than the rest ; but they were not more tender, and there did not appear to be any difference in their colour. I stated my opinion to the patient, that the removal of these prominent piles would be a likely means of causing the remainder to collapse, and of restraining the hæmorrhage which had so repeatedly returned, and so greatly weakened her. The next day I performed the operation. Having secured

secured the tumors with a common hook, I cut them off with a curved pair of scissars, as close to their basis as I was able. The hæmorrhage that followed was really trifling, and the gut immediately retracted within the sphyncter. A thick compress dipped in cold brandy and water was immediately applied, and the patient was directed to lie cool in bed, and to avoid hot drinks of every kind. She continued perfectly easy until the evening of the following day, when, having an inclination for a stool she voided a considerable quantity of grumous blood without any mixture of fæces. The nurse who attended her was so much alarmed by its appearance, that she wished to send immediately for me; but the patient would not permit it, assuring her that for many days previous to the operation she had voided as large a quantity of pure blood. The next morning she took a table spoonful of castor oil, which procured her two loose stools, without the least mixture of blood, or the smallest protrusion of the intestine. The precaution I at first gave her

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to

to avoid hot drinks, and to lie cool in the bed was still strictly regarded. She had a stool every day afterwards without the need of any medicine to procure it; and at the end of a fortnight every symptom of the disorder was perfectly removed.

CASE VI.

Mrs. H., about four years ago, had occasion to take a purgative medicine, which unexpectedly operated with great violence. In consequence of this, whenever she had a stool afterwards, a part of the internal membrane of the rectum was protruded through the sphincter ani, requiring the application of the fingers to return it to its proper position; and in a short time the gut became so weak, that it came down whenever she walked the distance of a hundred yards. She was not unfrequently also troubled with a considerable hæmorrhage from this part, which sometimes came on suddenly, and occasioned her great distress. Many remedies, both external and internal, had been made use of, but

but without affording her any relief. I at first suspected that this was one of the common cases of hæmorrhoids; and, as the patient was constitutionally costive, I directed her to take the size of a nutmeg of an electuary composed of sulphur and cream of tartar mixed with lenitive electuary, once or twice every day, according as the state of her bowels made it necessary. An ointment composed of equal parts of the powder of oak galls and elder ointment was also prescribed to be applied, morning and evening, to the protruded gut. These remedies, however, did not produce any good effect. She was then advised to introduce up the gut the end of a small candle, about two inches long, and as thick as the little finger, once or twice every day, in order by its pressure to hinder the protrusion, and, in this way, to give strength to the weakened part. A thick compress at the same time was confined on the anus by a T bandage, which was bound on the part as tight as it could be borne, without giving pain. These

applications seemed at first to have a good effect in keeping up the gut; but in a short time, the benefit they afforded ceased, and the introduction of the candle, and wearing the bandage, became a work of so much fatigue, that the patient could not be prevailed on to continue the use of them. I was now permitted to examine the seat of the disease, and I found the posterior and inferior part of the rectum protruded through the sphincter ani, about the size of the first joint of the little finger. There did not appear to be any distinct tumor in this part that could properly be denominated an hæmorrhoid; but the resemblance between the two disorders was so strong, and the distress of the patient so great, that I thought myself fully justified in recommending the excision of the protruded part, in the same way in which I would remove an inflamed hæmorrhoid. The patient giving her consent, I performed the operation on the following day. Having secured the most prominent part of the tumor with a hook, I cut it off in the usual

usual way with a curved pair of scissars. The hæmorrhage that ensued was very inconsiderable; and the gut immediately returned to its proper position. I covered the part with a cold saturnine lotion, and bound it on with a T bandage. About two hours after the operation the patient felt an uneasiness in the rectum as if she should have a stool; and shortly afterwards a large quantity of thick blood was brought away. This much alarmed both the patient and her friends, and occasioned them to send in haste for me; their alarm being increased by a return of the hæmorrhage before I arrived. I immediately applied a dossil of lint dipped in a strong vitriolic lotion to the wound, and repeated the use of a thick compress dipped in a cold saturnine lotion to the external part of the anus. A bolus containing five grains of dragon's blood, and an equal quantity of alum was given every two hours; the weight of the bed cloaths was lessened; and hot drinks of every kind were carefully avoided. No hæmorrhage of any conse-

quence took place after this plan was adopted. It was steadily continued for twenty-four hours; the compress being frequently dipped, during this time, in the cold saturnine lotion. The bolusses were afterwards given every four hours for another day. On the third the patient took some castor oil, which brought away a loose stool with a small mixture of blood, but without any protrusion of the gut. She had a slight sense of soreness in the wound for about a month; but then the pain wholly went off; and from that time to the present, which is upwards of three years, she has enjoyed her health perfectly in every respect.

THE END.

ADDITIONAL REMARKS
ON THE
O P H T H A L M Y.

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ADDITIONAL REMARKS

ON THE

O P H T H A L M Y.

IN the Remarks which I took the liberty to lay before the public on the subject of the Ophthalmy, the third edition of which was published in the year 1795, it was my aim to specify, with all the accuracy that was in my power, those remedies that appeared to me best adapted to accomplish the cure of the disorder. The remedy, however, which stood forth more prominent than the rest, and which seems to have made the deepest impression on the minds of the public is, the application of the Thebaic Tincture of the Old London Pharmacopæia; which medicine was directed by the College, in the year 1745*,

* No alteration was made in the Pharmacopæia of the College of Physicians in London, after the year 1745, until the year 1787.

to be made according to the following prescription ;

“ R.

“ Opii Colati, pondere, uncias duas

“ Cinnamomi,

“ Caryophyllorum Aromaticorum, sin-

“ gulorum, pondere, drachmam unam,

“ Vini Albi, mensurâ, libram unam.

“ Macera per hebdomadam sine calore ;

“ deinde per chartam cola.”

A note was added, after the prescriptions for vinous tinctures was finished, which was applicable to all of them, in the following words ;

“ Omnibus his vinis, postquam colata

“ sint, addere licet spiritûs vinosi tenuioris

“ vicesimam circiter partem, ut tutiora sint

“ â fermentatione. Etiam reponere con-

“ venit vitreis ampullis iisdem quibus

“ vinum in usus communes asservatur,

“ eâdemque curâ obturata.”

The mode in which I recommended the Tincture to be applied in cases of the

Ophthalmy was “ to drop one drop of
“ it into the eye, once or twice in the
“ day, according as the symptoms were
“ more or less violent*.”

The following observations were added immediately after this recommendation, in order to shew the effects which it usually produced :

“ The inflammation is often visibly
“ abated by only one application of this
“ tincture; and many bad cases have
“ been compleatly cured by it in less than
“ a fortnight, after every kind of remedy
“ had been used for weeks, and sometimes
“ months, without any success. But this
“ speedy good effect is not to be expected
“ in all cases indiscriminately. In some,
“ the amendment is more slow and gra-
“ dual, requiring the tincture to be made
“ use of for a much longer time ; and a
“ few instances have occurred, in which
“ no relief at all was obtained from its
“ first application. In cases of the latter

* Page 47 of the third Edition.

“ kind,

“ kind, in which the complaint is gene-
 “ rally recent, the eyes appear shining
 “ and glossy, and feel exquisite pain from
 “ the rays of light. However, notwith-
 “ standing these symptoms, the applica-
 “ tion is sometimes found to succeed;
 “ and whether it will or not, can only be
 “ determined by making the trial; which
 “ is attended with no other inconvenience
 “ than the momentary pain it gives.
 “ When it is found to produce no good
 “ effect, the use of it must be suspended,
 “ until evacuations, and other proper
 “ means, have diminished the excessive
 “ irritation; after which, it may again
 “ be applied, and bids equally fair for
 “ success, as in those instances in which
 “ it never disagreed.”

The annexed note was also added, for the
 purpose of enforcing an accurate attention
 to the mode of applying this medicine.

“ If two or three drops of the The-
 “ baic Tincture are dropped at once on
 “ the

“ the globe of the eye, the pain they occasion will be considerably greater, than if they are placed in the inner angle of the eyelids, and made to glide gradually on the eye, by gently drawing down the lower lid. At the same time that this latter mode of applying the Tincture is much less painful than the former, I have found, in a great variety of cases, that it is equally beneficial.”

The two next paragraphs, which I shall also here subjoin, were introduced in order to recommend the particular form in which the Thebaic Tincture is composed in preference to any other preparation of Opium, as that, on which its efficacy, when applied in cases of the Ophthalmy, in no small degree depended.

“ Though I have said, that Opium is the basis of the Thebaic Tincture, it is yet necessary to observe, that the manner in which it is here prepared is that, on which its efficacy not a little depends.
“ I have

“ I have several times applied a strong
“ solution of Opium in water without
“ any success. The pain indeed was
“ sometimes lessened for a while ; but
“ the inflammation always remained in
“ its full force, as if nothing had been
“ done. A fomentation made with poppy
“ heads, and applied warm, has been
“ found comfortable to the diseased part ;
“ and, in slight attacks of this disorder,
“ has been sufficient to remove it : but, in
“ more obstinate cases, it has repeatedly
“ been found ineffectual, until the tinc-
“ ture itself was used.

“ That I might judge still more cer-
“ tainly what it was in the Thebaic Tinc-
“ ture, which chiefly caused its utility, I
“ have also occasionally made the experi-
“ ment of solely applying the other prin-
“ cipal ingredient ; which is Mountain
“ Wine. But this I found, while it pro-
“ duced a still stronger irritation in the
“ eye, and of much longer continuance
“ than the Tincture, was seldom followed
“ with any kind of benefit.”

In

In addition to these cautions with regard to the mode both of compounding and applying the Thebaic Tincture in cases of the Ophthalmy, I added, in the second edition, another explanatory clause, in consequence of my receiving a complaint about the time that this edition appeared before the public, that its application had given great pain, and had not been followed by the ease and relief which I had given the reader reason to expect. The purport of this clause was to advise, in case such an accident should again happen, and the other rules which I have pointed out had been duly regarded, to correct the pungency of the Tincture by adding a larger proportion of Opium; with which addition I had known it to succeed in some of those instances in which it had at first failed. In the following note I adverted also to a probable cause of this accident.

“ The undue heat of the Tincture is to be
“ accounted for by the spirit; which,
“ though no part of the original prescrip-
“ tion, is commonly added to it, for the
“ purpose

“ purpose of preserving it. Care should
“ therefore be taken both that the quality
“ of the spirit be good, and that the quan-
“ tity be not more than is sufficient to an-
“ swer the end proposed by it.”

These different cautions with regard to the composition of the Thebaic Tincture, and the mode of its being applied, I flattered myself would have been sufficient to hinder it from being ever found injurious in those cases, for the cure of which I had taken the liberty to recommend it. It afforded me therefore the most sincere concern, when I heard a few weeks ago, a renewal of the old objection, of its giving intolerable and lasting pain, from a medical gentleman, of whose talents and abilities in the general line of his profession I have the highest opinion, but who, I believe, I may venture to say, has not had so extensive an experience in the treatment of disorders of the eyes as has fallen to my share,

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To obviate still further this objection, which appears to me now, as it ever has done, to be wholly unfounded, I have thought it advisable to bring before the public the express words in which it was at first recommended: And I beg it may be remembered that, in the present instance, as well as in all others where remedies are recommended which differ from those that have been long in general use, if variations be adopted either in the mode of compounding, or in that of applying them, or if the cautions with which their recommendation has been accompanied be either overlooked, or disregarded, in such a case, the proposer of these remedies can no longer be answerable for the effects which they are charged with producing.

It may not be improper to add, that in the late editions of the London Pharmacopæia, the College has thought proper to leave out the Thebaic Tincture entirely; to supply the place of which they have introduced another medicine, which is deno-

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minated by them *Tinctura Opii*. This latter tincture is composed of ten drams of opium digested in a pint of rectified spirits. The proportion of opium is, therefore, smaller than it is in an equal quantity of Thebaic Tincture; but, being infused in rectified spirit instead of wine, I believe it is usually supposed that it possesses, when taken into the stomach, an equal anodyne power with that of the Thebaic Tincture. It must, however, at once be evident, that if the *Tinctura Opii* be applied alone to a delicate and inflamed membrane, it will act with more pungency, and occasion greater pain, than would be occasioned by the application of an equal quantity of the *Tinctura Thebaica*. But as the *Tinctura Opii* is the only preparation of this kind that is directed by the last College Pharmacopæia to be kept by apothecaries, and as this tincture is intended by the college to be used, in general, as a substitute for the *Tinctura Thebaica* of the former Pharmacopæia, it does not seem improbable that medical men
may

may occasionally have forgotten the difference between these two remedies ; and, having the Tinctura Opii only at hand, may have applied it to the eye in those cases, in which the Tinctura Thebaica was alone recommended: in consequence of which mistake, the severe pain, occasioned by the application of the Tinctura Opii, may have been inadvertently attributed to the Tinctura Thebaica ; and the last-mentioned remedy, from this cause, may have been brought into unmerited disrepute.

The quantity of spirit permitted by the college to be added to vinous tinctures, to hinder them from passing into a state of fermentation, is only in the proportion of about one-twentieth part of the whole. If such a permission be accurately regarded, I do not believe that the stimulative effects of the Thebaic Tincture will be essentially increased by it ; but having procured this medicine from different druggists, I have observed so great a difference in the pain it has occasioned, when applied to an

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inflamed

inflamed eye, that I cannot help thinking the permission of the College has been received with too great a latitude. It may be proper however to remark, that a portion of the same tincture, which at first was highly pungent, has been found to lose much of its stimulative power after being kept a few months, and has then been applied with advantage in many cases of the Ophthalmia, although at first it was observed manifestly to disagree with them.

The pain, which the application of the Thebaic Tincture occasions, depends again in no small degree on the mode in which it is applied. If, as has before been stated, the eyelids be held open, and several drops be dropped on the ball of the eye from a considerable height, which has not unfrequently been done by persons unaccustomed to its use, the pain which it gives will be much greater than if a drop of it be placed in the cavity, which is made by the junction of the eyelids near the nose, and then the lids be separated,
either

either by drawing up the upper, or by drawing down the lower, so that the drop may glide gradually over the eye.

Much of the pain which this application produces depends, also, on the state of the eye immediately before it is used. It most commonly happens that an inflamed eye, on being inspected, becomes watery ; and if the eye be suffused in tears when the tincture is applied, its pungency will be much less felt than if it be quite dry. For this reason, among others, an advantage has not unfrequently been obtained by applying the Unguentum Hydrargyri Nitrati to the edges of the eyelids prior to the application of the Tinctura Thebaica. For, notwithstanding this ointment is a stimulating remedy, it is less pungent, if accurately used, than the Thebaic Tincture ; and in consequence of its exciting a considerable secretion of tears, the action of the tincture will be much less powerful after its use than it would have been before, and I have repeatedly

thought it has been equally if not more beneficial.

These short additional observations on the mode of compounding and applying the Thebaic Tincture will, I hope, be found of use to hinder a repetition of those discouraging effects which the external use of this medicine has been said occasionally to produce.

I wish it also to be remembered, that when the application of the Thebaic Tincture was first proposed to the public, as a remedy for the Ophthalmy, it was by no means offered as one that would in all cases accomplish a cure of the disorder, without the aid of further means. On the contrary, various other remedies, both local and general, were at the same time specified at some length; and a description of those states of the disorder was added, in which the different modes of cure that were pointed out appeared to me most likely to prove effectual.

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It would be thought superfluous if I was to repeat, in proof of this assertion, the observations which have already been published in three successive editions on this subject. I only beg leave to refer to the remarks on general and local bleeding; on the various parts to which blisters have been applied with advantage; on the benefit, as well as the injury, which at different times has been produced by strongly purgative medicines; on the use of the corrosive sublimate when administered internally in the intermittent Ophthalmy; on that of the peruvian bark when mixed with the sal polychrest in those cases where the Ophthalmy is accompanied with much debility; on the application of sugar, of the expressed juice of the dwarf lettuce, of alum, &c. &c. according to the different states in which this disorder is not unfrequently found; not to omit, the operation of removing foreign particles when insinuated under either of the eyelids, or adhering to the surface of the eye; that of discharging matter when accumulated in

the anterior chamber of the aqueous humour; and that of dividing enlarged and torpid blood vessels in the conjunctiva, when they appear to feed and continue an opaque speck on the cornea. All these remarks I may with the strictest veracity affirm have been fully confirmed by an experience in this department of the profession of no small extent, during a course of more than twenty years.

The enumeration of these different remedies will, I think, afford a sufficient answer, also, to an observation which I have sometimes heard advanced by medical men, that external applications afford but little assistance in cases of the Ophthalmia. Some have gone so far as to object even to the examination of an inflamed eye; imagining that every attempt to inspect it must increase the irritability of the organ, and thus tend to prolong the disease. Both these opinions appear to me to be founded on very erroneous reasonings; and, if acted upon, I fear they will frequently be
productive

productive of serious disappointments. Without an inspection of the eye it will often inevitably happen that we remain ignorant of the cause of the inflammation; and, without this knowledge, our remedies must be prescribed at random; and be as likely to do harm as to do good. And with regard to the accomplishment of a cure by general remedies, such as bleeding, blistering, purging, &c. although these are often highly proper, and may sometimes have proved effectual, I believe the number of cures that have been compleated in this way bears a very small proportion to the number of those in which they have been found wholly insufficient until different local remedies were called in to assist their operation. As an illustration of this remark, I beg leave to observe further, that I have known an inflammation of the eye proceed to a great height, occasioning extreme pain, and continuing many days, notwithstanding the use of all the general remedies that have been mentioned; when, upon a careful examination of the eye, the inflammation

mation has been discovered to arise from a small bit of dust which had insinuated itself under the upper eyelid ; the removal of which has occasioned the almost immediate cessation of all the symptoms. I have also known a violent Ophthalmia produced by the deposition of a small particle of chalky matter in the substance of the membrane which lines the upper eyelid, at the distance from its edge of more than the eighth part of an inch, the removal of which, with the point of a lancet, has caused, as in the former instance, an immediate abatement of all the symptoms ; notwithstanding general and even local remedies had been previously long applied without affording the smallest assistance. Various other instances of a similar kind might be mentioned ; but I flatter myself it is unnecessary to adduce them.

Permit me to add, however, that in avoiding one extreme we should be cautious that we do not expose ourselves to an equal degree of danger by falling into
another.

another. Although it be necessary for a surgeon to make himself acquainted with the state of an inflamed eye, it is not necessary for him to expose an eye in such a state to a great degree of light ; nor is it advisable to make his examination either long or frequent ; and although stimulating remedies appear to me to be sometimes indispensably necessary, before a cure of the Ophthalmy can be accomplished, it is not every inflammation to which the eye is subject which needs the use of such active applications. I am not by any means an advocate for their indiscriminate use. It is the duty of a medical man not only to contrive means for the recovery of his patient, but, as far as is possible, to consult his ease and comfort in the use of them. When these two objects are incompatible, it cannot admit a moment's hesitation, which of the two has a claim to the preference ; and temporary pain and inconvenience must certainly be submitted to, if health and ease cannot be attained without them. It is a happy circumstance,

stance, however, that a submission to these is not always necessary in the instances to which I allude at this time. A very considerable number of the cases of Ophthalmia which come under a surgeon's notice are occasioned by an acrimonious humour, secreted by the sebaceous glands which are situated on the inside and near to the edge both of the upper and lower eyelids. For the cure of these inflammations, in the Remarks I published on the Ophthalmia, I particularly recommended the application of the Unguentum Hydrargyri Nitrati, together with that of the Tinctura Thebaica of the old London Pharmacopœia; and it is an indubitable fact that these remedies in such cases have often afforded very essential service. The application however both of the ointment and tincture will give some degree of pain, though they be used in the most cautious manner. This, indeed, would be of very little importance, if an equal degree of relief could not be obtained in an easier, and sometimes in a more expeditious, manner :

ner: and I am happy in being able to add, that in many such cases I have lately accomplished a speedy cure of the inflammation, by anointing the edges of the eyelids, once in the day, with a small portion of the following ointment; which should be gently wiped off, soon after it has been applied, either with the point of the finger, or with the corner of a soft handkerchief.

R.

Hydrargyri Nitrati Rubri, (olim Mercurii Corrosivi Rubri,) subtilissimè
lævigati ℥fs.

Olei Viperarum ℥iii.

Ceræ Albæ ℥i.

Liquefiat cera cum oleo lento igne; coletur mistura, et gradatim addatur ad Hydrargyrum Nitratum Rubrum in mortario marmoreo: tunc assiduè agitetur donec refrixerit.

I have often found it useful also to foment the eye two or three times in the course of the day either with a strong decoction of poppy heads, or with a mixture
of

of Tinctura Opii and water, in the proportion of one-fifth of the former with four-fifths of the latter. Like every other remedy, the fomentation must be applied at first with some caution; and if after the trial of a few days, instead of producing the good effects I have mentioned, it be found to relax and weaken the eye, the use of it must be omitted, and applications of a gently stimulative and astringent nature be substituted in its place.

The peculiar nature of the inflammation should also be well considered. If there be much plethora in the system, it will be proper to make use of venesection freely and sometimes repeatedly; at other times blood should be taken, either from the temples by leeches, or from the inside of the eyelids by scarifying them with the point of a lancet. The use of blisters also should not be forgotten; nor the internal administration either of cooling, alterative, or strengthening, remedies, according to the state of the patient's general health.

health. But these are subjects on which I have enlarged at a considerable length in the Remarks published on the Ophthalmy.

I only request to have it remembered, that in those cases where the Unguentum Hydrargyri Nitrati Rubri, as above prescribed, either fails to relieve, or ceases to afford the assistance which it at first administered, the application of the Tinctura Thebaica will often prove highly beneficial; previous to which it will sometimes be of great use to touch the edges of the eyelids with a small portion of the Unguentum Hydrargyri Nitrati of the last London Pharmacopæia, warmed before a fire or candle, and taken either on the point of the finger, or of a small camel's hair pencil. It is not always easy to discriminate between the cases which are most likely to be served by the former and those by the latter of these remedies. The application of the Unguentum Hydrargyri Nitrati with that of the Tinctura Thebaica appears to me however, to be more particularly indicated in those instances,

stances, where, from the long continuance of the inflammation, the vessels of the Tunica Conjunctiva are not only dilated but are become relaxed and torpid ; the eye being weak and irritable when exposed to a strong light, but without signs either of active inflammation or general plethora.

Cases not unfrequently come under a surgeon's notice, in which, notwithstanding the sight is so weak that every attempt to read or write occasions great uneasiness, and the person is disabled from pursuing the common concerns of life, yet no alteration can be perceived in the appearance of the eye from that of one whose vision is strong and useful. This is sometimes occasioned by that diminution of convexity in the transparent coats and humours of the eye, which takes place sooner or later in the eyes of all as they advance in life, and which can only be relieved by the use of suitable convex glasses. Sometimes, again, as I mentioned in a note annexed to the third edition of Remarks on the Ophthalmia, the

the weakness is occasioned by a morbid secretion from the sebaceous glands on the edges of the eyelids; which secretion, though occasionally abundant in the form of a thick gum, and causing a great excoriation of the part on which it lies, in other instances, produces only a slight redness of the lid, which is invisible unless accurately examined. In several of these cases much benefit has been afforded by the application of the Unguentum Hydrargyri Nitrati. In others, after this ointment and various other remedies had been applied for a long time without affording any relief. I have seen great assistance afforded by applying the corner of a handkerchief to them, night and morning, dipt either in hot water, or in a strong infusion of chamomile flowers, as hot as the eye can bear it. The effect produced by this application is often highly grateful, both in cooling and strengthening the part to which it is applied.

It may strike the reader with some surprise, that hot applications should be

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recommended in order to strengthen a weakened organ ; it being the more usual opinion that hot remedies have a tendency to relax those parts to which they are applied. It is well known, however, that the evaporation of liquors is increased by heat ; and that cold is generated during the process of evaporation. If, therefore, a remedy be applied to a heated part during the state of its evaporation, it is not unreasonable to expect that the quicker this process takes place, the greater will be the cooling effect which the remedy produces ; and in proportion as a heated part is cooled, it often happens that the strength of that part is increased. The application of hot water to a weak eye has repeatedly been experienced to produce this effect ; but I think I have found a hot infusion of chamomile flowers still more serviceable. And if the eye be in much pain, a hot decoction of white poppy heads is preferable to either of them ; to which I have sometimes added with advantage

tage a fourth or even a third part either of brandy or some other spirit.

But having taken the liberty to propose the application of hot remedies as occasionally useful to a weak eye, I feel it incumbent on me to add, that it is not always easy to determine, where the cause of the weakness is imperceptible, whether hot or cold applications will afford the greatest assistance. An enquiry into the constitution of the patient, and into the effects of the different kinds of remedies that have been employed on former occasions, will sometimes afford a guide to direct us in such a case. A young lady, for example, applied to me a short time ago, on account of a weakness in both her eyes, which prevented her from reading or working for any length of time without suffering great uneasiness from it. No alteration could be perceived in the appearance of either the eyes or eyelids, and no kind of glasses afforded her any assistance. Vitriolic and astringent applications had frequently been

tried, but always gave her pain, and seemed to increase the indisposition. Upon enquiring further, I learnt that though the patient, at the time she consulted me, was in perfect health, she had formerly had so great a weakness in her back, that for many months she was obliged to lie constantly in a horizontal posture. A great variety of the usual strengthening remedies had been employed to relieve her ; but they did not produce the least amendment. At length she was carried to Bath, and there compleatly recovered her strength and activity by bathing in the hot baths of that place. This information induced me to hope, that the weakness in the patient's sight might have been brought on by a cause somewhat similar to that which occasioned the weakness in her back ; and I thought it not improbable that it might be relieved by a similar mode of treatment. For this purpose I advised her to try the effects of fomenting her eyes, night and morning, with a hot infusion of chamomile flowers. The application afforded her almost instant relief ; and by pursuing its

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use, her sight was speedily restored to such a state of strength, as to enable her to employ them in reading and working, without suffering any inconvenience from it.

It must not be forgotten, however, that the application of cold water to the eyes every morning is, with many, not only a common but a salutary practice. Far from meaning to discourage the continuance of it, I wish to make it still more useful, by recommending a greater accuracy in the mode of employing it. Instead of using for this purpose the water that has been kept in the bed-room during the night, I would advise to send for a hand basin of fresh water from the spring just at the time when it is intended to be used. And with regard to the mode of using it, I would recommend to dip the corner of a towel in the water, and to apply it to the eyes for a few seconds; then to dip it again and re-apply it; and thus to repeat the application thirty or
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forty times in quick fucceffion ; wiping the face perfectly dry immediately after it has been ufed. A very fmall fhare of experience, however, in fuch cafes will fhew that this remedy is not at all times competent to the cure of a weak fight. When therefore there is no vifible caufe for the weaknefs, and when the ufual ftrengthening remedies have been found rather to increafe than to leffen the debility, it appears to me highly proper to have recourfe to thofe that are of a directly contrary nature. A refort in cafes of difficulty to remedies that are of a nature oppofite to thofe that have before been ufed, is by no means a new practice ; and in various diforders, medical as well as chirurgical, the adoption of it has been productive of the beft effects*.

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* It was the obfervation of Afclepiades, who lived in the time of Mithridate, and was one of the firft Greek phyficians who practifed medicine at Rome, that if a man attacked with a phrenfy came under his care, he would treat him in a particular way, which he fpecifies ; but if the patient had been previously under the care of any other phyfician, and a treatment, fimilar to that which he propofed,

I must not omit to mention, that in some instances where the eye has been particularly weak, without a perceptible cause to produce

posed, had been adopted by him and had not succeeded, he would then have recourse to one that was diametrically opposite to it.—Antonius Musa, again, who was physician to the Emperor Augustus, entertained a similar opinion on this subject. The Emperor on account of an illness, which had been supposed to arise from an affection of the liver, had been directed, among other remedies, to bathe in a hot bath. But this, like the rest, having failed to afford him any relief, Musa was consulted; and he, adopting a plan of treatment directly opposite to that which had before been used, prescribed to the emperor to bathe in the cold bath, and to drink cold water. The history adds, that under this treatment the emperor was speedily restored to health, and that Musa, in consequence of the success of his prescription, received a large emolument, and, with it, distinguished honours, both from the emperor and senate, not only for himself but for medical professors in general. It should not be forgotten, however, that the same physician being afterwards consulted on account of the illness of Marcellus, the nephew and adopted son of Augustus, he prescribed for him a remedy similar to that which had been employed by the emperor. But instead of curing Marcellus, it killed him. Musa was charged with ordering this cold treatment at an improper period of the disorder, by the instigation of the Empress Livia, on purpose to destroy him. Whether this charge be true or false is uncertain; but the consequence

produce it, the application of spirituous remedies that have been highly rectified, such as the medicine sold at Riga, under the name of the Riga Balsam, or the Æther of the London Pharmacopœia, either alone, or mixed with an equal proportion of sugar and water, has sometimes been greatly useful. In a few instances, also, the excitement of a violent inflammation by the application of other stimuli, has been found of use to overcome the enfeebled action of different parts of the eye; and afterwards by the assistance of cold water alone, and sometimes of sea water, they have been restored to their proper strength and usefulness. Some again, in cases like that which I am describing, have made use of their own urine, and have thought its application to their eyes has much contributed to strengthen the sight, and to obviate slight though troublesome inflammations to which, previous to its use, their eyes had often been subject. The experience

consequence of it was that Musa was driven from the Court, and shortly afterwards, was murdered during a sedition of the people.

rience of these persons ought not to be neglected ; although it will occur to every one that the strength of the urine must greatly vary according to the diet that is used, and the indispositions of body to which we are occasionally subject. I must also be permitted to add, that it ought not on any account to be applied, when there is an acrimonious secretion from the membrane which lines the urinary passage. An accidental application to the eye of matter, secreted by the urethra at this time, I have reason to believe, has been the cause of some of the most violent and dangerous Ophthalmies that have ever fallen under a surgeon's observation *.

* See on this subject the Remarks I published on the Ophthalmia, 3d Edit. page 27.

F I N I S.

ERRATA.

ERRATA.

On the Fistula Lachrymalis.

Page 44, line 20. *For sensible the ease, read sensible of the ease.*

73, — 7. *Dele in.*

On Hæmorrhoids.

Page 26, line 1. *Dele the.*

On the Ophthalmy.

Page 2, line 21. *For obturatâ, read obturatis.*

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